ABSTRACT OF

The Erasmus Wilson Lectures

ON THE

PATHOLOGY AND TREATMENT OF THOSE DISEASES OF THE LIVER WHICH ARE AMENABLE TO DIRECT SURGICAL INTERFERENCE.

Delivered at the Royal College of Surgeons of England on Feb. 21st, 23rd, and 25th, 1898,

BY H. J. WARING, M.S. LOND., F.R.C.S. ENG.,

ASSISTANT SURGEON TO THE METROPOLITAN HOSPITAL; SENIOR DEMONSTRATOR OF ANATOMY AND DEMONSTRATOR OF OPERATIVE SURGERY, ST. BARTHOLOMEW'S HOSPITAL.

LECTURE I.

Delivered on Feb. 21st.

[MR. WARING opened his address with an account of the anatomical relations, vascular supply, and malformations of the liver, the latter being due either to the use of tight clothing or to the contraction of scar tissue. He continued:]

Those diseases of the liver which are amenable to direct surgical interference may be conveniently divided into six groups, four important ones and two of rare occurrence, the latter only very occasionally coming under observation. These six groups may be arranged as follows according to their surgical importance, viz.: 1. Suppurative inflammations of the liver which result in the development of one or more hepatic abscesses. 2. Cystic affections of the liver, parasitic and non-parasitic. 3. Traumatic affections of the liver, perforating and non-perforating. 4. Tumours of the liver, malignant and non-malignant. 5. Floating liver. 6. Congenital hernia of a portion of the liver or hepatomphalos.

1. SUPPURATIVE INFLAMMATIONS OF THE LIVER WHICH LEAD TO THE DEVELOPMENT OF ONE OR MORE HEPATIC ABSCESSES.

An inflammation of the liver which gives rise to the formation of an abscess may be due to a considerable variety of causes. The frequency of these causes varies according to the country in which the patient lives or has lived. I have collected the statistics of abscess of the liver in St. Bartholomew's Hospital during the years 1887–1897 and have added them to the table prepared by Dr. Norman Moore for the years 1867–1887. I have thought it advisable to make a collection of these cases from one of our largest hospitals in order to show the comparative frequency of the different forms as they occur in England. In Dr. Moore's table, comprising 32 fatal cases which were examined post mortem between the years 1867–1886, 15 were due to, or associated with, ulceration of the cæcum or colon, 3 were dependent upon ulceration or perforation of the vermiform appendix, 4 occurred in connexion with general pyæmia, 5 were apparently primary in the liver (no definite cause being discoverable), and 1 was due to each of the following causes—viz., enteric fever, gall-stones, abscess of the ovary, calculus of the kidney with suppuration, and a sinus in the leg; 21 of these were males and 11 females. I have collected all the cases from the year 1887 to 1897 and find 23 examples. Of these 13 were due to, or associated with, ulceration of the cæcum or colon (these include 10 which were apparently due to dysentery), 4 were apparently primary in the liver, 2 were secondary to ulceration and perforation of the vermiform appendix, 3 occurred as part of a general pyæmia, and 1 was due to ulcerative pericarditis. Of the cases in my list 20 were in males and 3 in females. From this collection of cases it is apparent that most of the cases of hepatic abscess which occur in England fall mainly into two groups—firstly, pyæmic abscesses, and secondly abscesses which are of the nature of tropical abscesses and usually of dysenteric origin. Most of the latter cases have occurred in people who have lived in tropical climates and have suffered from dysentery. This sequence of events, however, is not constant.

1. *Abscess of pyæmic origin.*—An abscess of the liver which is of pyæmic origin may have the septic material carried to the liver from the primary focus of disease by two channels—the portal vein and the hepatic artery. According to some writers the inferior vena cava may be the means of conveyance, but this is very improbable. First, as to the portal vein. Any focus of septic inflammation or suppuration within one of the anatomical structures from which the radicles of the portal vein arise may become the starting-point of a pyæmic hepatic abscess. The commonest seat of the septic process is either an ulceration of the cæcum or of the colon. The vermiform appendix is occasionally the starting-point. Septic inflammation of any of the pelvic viscera such as the uterus or the bladder may be the cause. It appears to be probable that a considerable proportion of the hepatic abscesses which follow dysenteric ulceration of the large intestine are due to the entrance of colonies of septic micro-organisms into the radicles of the portal vein from the floor of an ulcer. Next as to the hepatic artery. When septic emboli reach the liver along the hepatic artery they usually come from some distant focus of disease and not from any of the viscera within the portal area. Head injuries which have become the seat of suppurative inflammation and the different forms of septic osteomyelitis and periostitis are occasionally the starting point of this form of abscess. As to the inferior vena cava it has been thought by some observers, such as Majendie and Meckel, that a suppuration in the liver might be caused by the passage of septic emboli from the heart along the inferior vena cava and the hepatic veins. But there is no direct evidence in support of this theory and it can be dismissed as being very improbable. The micro-organisms which have been met with in pyæmic abscesses of the liver are somewhat numerous. The most common ones which have been described are staphylococcus pyogenes aureus, bacillus coli communis, and the ray fungus or actinomyces. Pyæmic abscesses of the liver apparently always contain micro-organisms.

2. *Tropical abscess.*—Tropical abscess of the liver is the name given to a variety of hepatic suppuration which occurs for the most part, although not entirely, in people who live or have lived in tropical or sub-tropical climates. The abscesses are either single or not more than two or three in number. The affection appears to exist as an endemic disease in many countries which lie within forty-five degrees of the Equator (north or south), whilst those cases which occur in more temperate climates are of a sporadic character. In Europe the disease occurs most frequently in those countries which lie on the northern coast of the Mediterranean. It has been stated that no cases have occurred in England except in people who have been in hot climates. This is undoubtedly incorrect, since cases have been met with in which all the characteristics of a tropical abscess have been present and the patient has never been out of England. In most of the tropical cases, but not in all, the occurrence of an attack of amœbic dysentery seems to be the exciting factor. This attack may occur a considerable time before the development of the abscess occurs. When the purulent contents of a tropical abscess are examined the amœba coli is usually absent, but if the walls of the abscess cavity and the adjacent liver tissue be investigated they will be found to contain numerous amœbæ. The contents of a tropical abscess in many instances are thick and of a reddish colour and are said to resemble anchovy sauce.

3. *Hepatic abscess due to a pathological condition of some part of the biliary ducts.*—Gall-stones are not unfrequently the cause of an abscess of the liver in non-tropical climates. When they are located within the gall-bladder, the cystic duct, or one of the intra-hepatic bile ducts they may by a process of constant irritation cause inflammation and ulceration of the adjacent part of the mucous membrane and if this pathological process extends to the neighbouring part of the liver it becomes the exciting cause in the development of a hepatic abscess.

4. *Hepatic abscess due to injury.*—Injuries of the liver which are followed by the formation of an abscess may be either perforating or non-perforating, the former being the more common. Perforating injuries may be wounds caused by stabs with sharp instruments or the projectiles of firearms. All cases of this kind are associated with the introduction of septic micro-organisms into the damaged portion of the liver. Concerning the rarity of abscesses of the liver which are due to non-perforating wounds Carl Langenbeck states that less than forty have been recorded in

surgical literature. In my list of cases none were due to this cause.

5. *Hepatic abscess due to animal parasites.*—A number of abscesses of the liver have been met with which are due to pathological processes induced by the presence of animal parasites. The commonest parasite of this kind is the echinococcus. Ascarides may also migrate from the duodenum along the common bile-duct to the liver or the gall-bladder.

6. *By direct extension from adjacent organs.*—An inflammatory or suppurative process may extend from an adjacent organ, such as the base of the lung, and cause the development of an abscess of the liver. Several cases have been met with in which tuberculosis of the base of the lung has extended through the diaphragm and caused the formation of an abscess in the underlying portion of the liver.

7. *Hepatic abscess as the result of acute specific fevers.*—Several cases of abscess of the liver have been met with which have been the result of an attack of typhoid fever and scarlet fever has also been known to produce this condition.

From a surgical point of view it is important to differentiate between those abscesses of the liver which are either single or not more than two or three in number and the multiple pyæmic ones, since in the former group of cases direct surgical interference has a much greater chance of being successful than in the latter class of patients. The former class includes tropical abscess, both the so-called amœbic and the ordinary variety, some of the abscesses which are due to gall-stones and ascarides, those which follow an injury to the liver, and those which are caused by suppuration in a hydatid cyst. Abscesses due to other causes are in the majority of instances pyæmic in character and multiple.

[Mr. Waring here described the general symptoms and diagnosis of hepatic abscess and continued:]

Treatment.—In former times it was advised that the pus should be evacuated through the needle of an aspirator or through a cannula the trocar of which was withdrawn, but it was found in cases treated by this method that suppuration along the track of the needle or cannula was liable to occur and in many instances a leakage of pus into the adjacent part of the peritoneum or pleura followed. On this account it is advisable to consider puncture of an abscess of the liver with the needle of an aspirator or with a trocar and cannula merely as a diagnostic measure. In every case a free opening should be made into the cavity of the abscess so that the purulent contents can be completely evacuated. The abscess may be attacked either through an incision in the abdominal wall, or through an incision in the thoracic wall, or through an incision in the lumbar region. The abdominal and thoracic operations are the most frequently practised; it only occasionally happens that a case is suitable for the lumbar operation. Whenever possible the opening of the abscess should be made through the anterior abdominal wall. The hepatic area is first rendered aseptic by the usual method of washing with soap and hot water, turpentine, or ether, and then with a solution of perchloride of mercury (1 in 500 or 1000).

When the exact locality of the abscess has not been ascertained the needle of an exploring syringe is pushed through the tissues overlying the most prominent portion of the hepatic swelling until the cavity of the abscess is reached. The needle is then moved about in order to determine the position of the abscess cavity. When this has been done an incision is made over the middle part of the abscess but extending upwards more than downwards. In practice an incision three inches long will be made through the abdominal wall over the hepatic swelling and extending vertically downwards from the costal margin. The incision is deepened until the surface of the liver is exposed. In order to do this it is usually necessary to open the peritoneal cavity, but in a small percentage of patients it will be found that the inflammatory process has extended to the peritoneal covering of the liver and has caused the formation of adhesions between the visceral and parietal layers of the serous membrane. When the peritoneal cavity has been obliterated in this manner the incision is further deepened until the cavity of the abscess is reached, the overlying hepatic tissue being cut through in order to open up the collection of pus in the interior of the gland. This incision in the liver may be made either with an ordinary scalpel or with the knife of a Paquelin's cautery. In most cases it will be found convenient to follow the needle of the exploring syringe until the abscess is reached. The further stages in the treatment of an abscess are similar to those recommended in connexion with opening an abscess in which the overlying visceral and parietal layers of peritoneum are not adherent. When the peritoneal cavity in the region of the abscess has not been obliterated by the formation of adhesions the margins of the parietal wound are retracted in order to well expose the diseased part of the liver, the wound being lengthened for this purpose if necessary. The peritoneum around the exposed part of the liver is now packed carefully with aseptic marine sponges in order to prevent or avoid as far as possible contamination of the adjacent parts of the peritoneum with the contents of the abscess. The peritoneum having been well protected the hepatic tissue is incised until the cavity of the abscess has been opened. Immediately this has been done the finger of an assistant is introduced through the opening and the liver is hooked forwards so as to bring it well into contact with the anterior abdominal wall. The contents of the abscess are allowed to escape—a proceeding which may be facilitated by exerting pressure upon the anterior abdominal wall in a direction upwards and backwards. The interior of the abscess cavity is irrigated with an aseptic solution such as mercury perchloride (1 in 1000). Next, the surgeon examines with his forefinger the interior of the abscess in order to detect any other abscess which may be present in the adjacent portions of the liver. If one or more further abscesses are found the intervening hepatic tissue between the cavity of the main abscess and that of the secondary ones is broken down with the finger and the contents allowed to escape. The interior of the smaller abscesses is then irrigated as in the case of the larger one. When this has been carried out the interior of the entire abscess cavity is sponged dry by sponges on holders. Next, the cavity is packed with a long strip of iodoform gauze. The margins of the hepatic wound are united to those of the abdominal incision by the insertion of a series of interrupted sutures. Silk sutures are the best for this purpose; they should not be too fine and they are inserted at intervals of one-third or one-quarter of an inch for the entire length of each margin of the hepatic incision, the entire series being inserted before any are tied. In some patients in place of packing the interior of the abscess cavity with a long strip of iodoform gauze a sponge plug may be placed in the interior of the abscess during the insertion of the sutures and when the suturing has been completed this is removed and a large rubber drainage-tube passed down to the bottom of the abscess cavity, one end protruding from the external wound. When one of these methods of dealing with the abscess cavity has been adopted the wound is covered with large aseptic dressings which are carefully and securely fixed in position by the application of a many-tailed bandage.

After-treatment.—The after-treatment is directed towards the removal of all secretion from the abscess as soon as it is formed, the prevention of contamination of the peritoneal cavity, and the maintenance of the strength of the patient. The packing should be removed from the interior of the abscess at the end of thirty-six or forty-eight hours. The interior of the abscess cavity is irrigated with an antiseptic solution and then packed as before. This method of dressing should be repeated daily until the cavity has closed up. After the first few days a rubber drainage-tube may be used instead of packing. Föntan recommends after the abscess cavity has been emptied and during the irrigation of its interior that its walls should be scraped with a curette. This procedure does not appear to be worthy of adoption on account of the liability of the occurrence of severe hæmorrhage and the impossibility of rendering the abscess cavity quite aseptic when micro-organisms are present in the pus. Some surgeons have advocated the performance of this operation in two stages, several days being allowed to elapse between them. In the first stage the affected portion of the liver is exposed and in the second stage the abscess cavity is opened. This variety of operation may be practised with advantage in abscesses which are somewhat chronic; but in all cases of acute abscess in which the abscess cavity is probably increasing in size at the expense of the adjacent liver substance it is safer and preferable to perform the operation in one stage as recommended above.

Operation through the thoracic wall.—In many cases of abscess of the right lobe of the liver it is necessary to operate through an incision in the thoracic parietes on

account of the high level at which the purulent collection is located and the difficulty in dealing with it through an incision in the anterior abdominal wall. This operation is generally called the "transpleural" or the "transthoracic" operation. It may, like the abdominal procedure, be carried out in either one stage or in two. If it is necessary to go through the pleural cavity on account of the parietal and visceral layers of the right pleural sac not having become adherent owing to the formation of inflammatory adhesions, the result of extension of inflammation from the liver, it may be advisable to allow two or three days to elapse between the exposure of the affected portion of the liver and the incision into its substance and evacuation of the pus. In the majority of patients, however, it will be found either that the base of the right pleura is the seat of a localised empyema or the cavity has been obliterated by adhesion of the two layers. The operation is performed thus: after the patient has been anæsthetised and turned somewhat on the left side in order to give free exposure of the part to be operated upon a site is selected on that part of the thoracic wall which overlies the most prominent portion of the hepatic swelling, and an incision from three to four inches long at first, but which may be lengthened if requisite, is made along the long axis of a rib. The soft tissues are divided and the external surface of the rib exposed and separated from its attachments with a periosteal elevator. A portion, usually about three inches, is then excised. The underlying costal pleura is cut through in the line of the first incision and through the middle of the space from which a part of the rib has been removed. If care be exercised in making this incision the intercostal arteries will not be injured. If the layers of the pleura have not become adherent air will rush in as the pleural cavity is opened and the lung will collapse. The diaphragm is now sought for in the bottom of the wound; usually it will at once protrude owing to the fact that it has been pushed upwards and outwards by the enlargement of the liver. The layer of pleura which covers the upper aspect of the diaphragm is now incised in the line of the original incision and dissected up for a short distance. The length of this incision should be about two inches. The margins of the wounds in the costal and diaphragmatic layers of the pleural sac are now brought together and fixed in apposition by a series of fine silk sutures inserted at very short intervals. In some cases a continuous suture can be inserted more quickly and will serve the same purpose. If the diaphragmatic pleura is very tightly stretched on account of the hepatic enlargement the abscess can be partially emptied by the needle of an aspirator. When the pleural cavity has been shut off in this manner an incision is made through the diaphragm as it is exposed at the bottom of the wound, the margins of this incision are dissected up for a short distance and then closely and securely fixed to the margins of the thoracic incision by the insertion of a series of silk sutures. Each suture passes through the diaphragm and the muscular and cutaneous layers of the thoracic wall. When all these sutures have been inserted and tied the pleural cavity ought to be completely shut off from any communication with the exterior of the region of the hepatic swelling. When it is considered advisable to perform this operation in two stages the wound is now packed with tampons of aseptic gauze and dressings applied. After from two to four days the next stage of the operation is carried out. When the two layers of the pleura are adherent or there is in addition an empyema of the basal portion of the right pleural sac or the abscess is an acute one the operation should always be completed in one sitting. When the surface of the liver has been exposed thus the needle of an aspirator is pushed through the hepatic substance until the abscess cavity is reached. The liver tissue is then divided with a knife along the needle and a free opening made into the abscess cavity, after which the cavity is packed with tampons of aseptic gauze and absorbent dressings are then applied and fixed in position by a bandage.

Operation through the lumbar region.—When the lower and posterior portion of the right lobe of the liver is the seat of the abscess and enlargement of the organ has taken place in a downward and backward direction it is usually advisable to evacuate the purulent collection through a lumbar incision. An incision three inches long is made along the lower border of the last rib commencing a short distance outside the outer border of the erector spinæ muscle. The various strata of the abdominal wall are divided until the swelling caused by the hepatic enlargement is exposed. The incision in these cases should be slightly more in front and higher than the ordinary incision for lumbar nephrectomy; the liver should be exposed above and slightly external to the right kidney. The kidney is usually pushed downwards by the hepatic enlargement. The peritoneum is not opened in this operation. When the enlargement of the liver has been laid bare an incision is made through the hepatic tissue until the purulent collection is reached. The further treatment is similar to that recommended in the abdominal and thoracic forms of operation.

[Mr. Waring then discussed the complications of hepatic abscess and the consequences of spontaneous rupture. He concluded his address as follows:]

Prognosis.—Of the 22 cases which have occurred in St. Bartholomew's Hospital during the years 1887-1897 16 were operated upon and 6 were not. Of those who were not submitted to operation all died. Of those operated upon 4 were aspirated, 5 were treated by thoracic operation, 5 by an abdominal operation, 1 by both abdominal and thoracic methods, and 1 by a lumbar operation. In 2 of the cases in which a thoracic operation was performed the patients recovered and in 3 death ensued; of those treated by an abdominal operation 4 recovered and 1 died; the 1 lumbar operation was successful; and the patient upon whom both abdominal and thoracic operations were performed died. From a consideration of these cases and also the various tables of results by other writers it appears to be conclusively shown that a greater percentage of patients recover among those who have been submitted to an abdominal or lumbar operation than among those who have been operated upon by the thoracic method.

Remarks
ON
6657 ADMINISTRATIONS OF ANÆSTHETICS CONDUCTED AT THE LONDON HOSPITAL DURING THE YEAR 1897.

In three Clinical Lectures delivered at the Hospital,

BY FREDERIC W. HEWITT, M.A.,
M.D. CANTAB.,
ANÆSTHETIST TO THE LONDON HOSPITAL, CHARING-CROSS HOSPITAL, AND THE DENTAL HOSPITAL OF LONDON.

LECTURE II.[1]

Delivered on Feb. 11th, 1898.

GENTLEMEN,—I wish to place before you to-day all the cases in which threatening symptoms, partly or wholly referable to the anæsthetic, were recorded. You will see by referring to the table before you that there were thirteen in all. In some of these the symptoms of danger arose during the administration, in others they occurred afterwards. It is always difficult, and sometimes impossible, to be absolutely certain what share the anæsthetic has had in the production of dangerous symptoms; but I have gone carefully through all the notes of the 6657 administrations and the table represents my conclusions.

In all of the cases tabulated there is, I think, no doubt that the anæsthetic had some influence in bringing about the symptoms to which I shall presently direct your attention; and in order to give you an idea of what I consider that influence to have been I have arranged the cases in different columns according to the factors which I believe to have been present. When any dangerous symptoms arise during or after the use of an anæsthetic for a surgical operation one or more of four factors may be responsible—viz., (1) the anæsthetic itself, (2) the state of the patient, (3) the posture of the patient, or (4) the surgical operation.

Let us first of all turn our attention to the cases of anxiety under ether. The first of these is of interest because the remedy of venesection was adopted, and quite successfully. The patient was a female, seventy

[1] Lecture I. was published in THE LANCET of Feb. 19th, 1898.

years of age, and ether was given for the removal of the eye-ball. During the administration, which was conducted by means of a Clover's apparatus, and before the operation had commenced the patient's breathing became impaired. This is not uncommon just as patients are passing into profound insensibility; indeed, we may regard embarrassed breathing as more likely to arise during light than during deep anæsthesia. In this case the breathing stopped before the patient was thoroughly anæsthetised. Many might apply the expression "holding the breath" to the condition under consideration; but such an expression always seems to me to imply voluntary action, which in the case before us had been abolished. As the breathing did not recommence and as the patient was very

Cases in which Serious Symptoms, partly or wholly referable to the Anæsthetic, were recorded.

Anæsthetic.	Factors. A, During the administration. Anæsthetic.	1. State of patient. 2. Anæsthetic.	1. Operation. 2. Anæsthetic.	1. State of patient. 2. Operation. 3. Anæsthetic.	1. Posture. 2. Anæsthetic	B. After the administration. Anæsthetic.
Ether (2910 cases)...	2	1	—	2	—	2
Nitrous oxide (1362 cases)	1	—	—	—	—	—
Chloroform (677 cases)	1	1	—	—	—	—
Ether, then chloroform (293 cases)...	—	—	1	—	—	—
Nitrous oxide, then ether (220 cases)...	—	1	—	—	—	—
A.C.E., then chloroform (31 cases) ...	—	—	—	—	1	—
Totals	4	3	1	2	1	2

cyanosed and the veins were greatly distended, the house surgeon performed venesection. About ten ounces of blood were withdrawn, and breathing immediately recommenced. No other restorative measure was used and no further difficulty arose. In the next case, which occurred in the out-patient department, the operation was for an anal abscess, and the report simply states that "the patient stopped breathing when just under the anæsthetic." Cyanosis was marked. Artificial respiration was performed and the breathing recommenced. The operation was then finished. This is similar to the first case under ether, except that artificial respiration was performed instead of venesection.

It is very common just before anæsthesia is established for the breathing to become temporarily suspended. This is usually due, as an inspection of the neck will prove, to the anæsthetic vapour or the mucus which it produces setting up acts of swallowing, which are more tardily performed than when consciousness is intact. During normal deglutition the glottis closes momentarily; but during the passage into profound anæsthesia the act of deglutition is liable to be spread out, so to speak, over a considerable time during which no air enters or leaves the chest. In addition to this cause for the suspended breathing of light anæsthesia there is yet another—viz., general muscular spasm—which by reason of its affecting those muscles which are directly or indirectly concerned in maintaining respiration brings breathing to a standstill. In the vast majority of cases this impaired breathing, which comes on just before stertor, passes off spontaneously or, if it does not do so, it may be made to pass off by removing the inhaler, rubbing the lips briskly with a towel, and pushing the lower jaw forwards. In more obstinate cases in which the jaws are clenched and the neck muscles are rigidly contracted it may be necessary to separate the teeth and to pass the finger to the back of the pharynx, when breathing will recommence. It is important to bear in mind that unless such simple remedial measures are adopted for the relief of this form of arrested breathing, a very dangerous or even fatal degree of asphyxia will be liable to arise.

The next case is a very interesting and instructive one. The patient was a man, thirty-seven years of age. He was of rather spare build, but muscular; and he had drunk heavily. There was nothing in his appearance to suggest that he was in a bad state of health. His chest was stethoscopically examined, and I understood the clerk to say that nothing abnormal was discovered. The operation to be performed was internal urethrotomy. Ether was accordingly given under my supervision by means of a Clover's inhaler. As you are aware it is advisable in administering ether to well-built men of alcoholic habits to limit the air-supply to a greater extent than in anæsthetising other types of patients, otherwise inconvenient struggling and excitement will arise. Ether was therefore administered to this patient with the minimum allowance of atmospheric air. In ordinary patients of this age and appearance this plan answers admirably, deep anæsthesia of a satisfactory type ensuing in about four or five minutes. But in this particular case there was an unsuspected element present which very greatly altered the usual course of events. The operation, which was a very short one, was on the point of completion when I noticed that the patient presented an appearance which is very unusual after a short administration of ether. His eyelids were only half closed, the eyeballs were slightly upturned so that rather more of the sclerotics than usual appeared, and the colour of the face was pale and dusky. On putting my finger to the radial artery I found that the pulse was very small, very rapid, and irregular. The respiration was, however, regular and deep. On placing my hand over the cardiac area I felt a rapid, irregular, and tumultuously heaving impulse which extended into the epigastrium and beyond the mid-sternal line. On applying my stethoscope I made out a murmur which, however, it was impossible to diagnose owing to the noisy breathing and embarrassed cardiac action. The conjunctival reflex was now returning. Gradually the ashy colour lessened and signs of returning consciousness began to appear. No remedial measures whatever were necessary, and the patient was sent back to the ward without displaying any further symptoms. It was quite clear that some grave cardiac lesion was present, and that the patient had passed through a critical condition under ether. Dr. Hadley, who very kindly examined the chest some few days after the operation, reported: "Dilated hypertrophied heart, irregula in action, with mitral regurgitation and aortic obstruction. Compensation fair, but a history of failure of compensation ten weeks ago (in dropsy). There is none now and the only sign of failure of compensation left is the irregularity."

You will remember that I have on many previous occasions pointed out to you the necessity of stethoscopically examining the chest before selecting your anæsthetic and the method of its administration. Although this was done in the above case the report given by the clerk was unfortunately misunderstood and the patient was anæsthised by a wrong method as the subsequent symptoms testified. In cases of morbus cordis in which there is evidence of want of compensation all asphyxial methods should be carefully avoided. Nitrous oxide, nitrous oxide in conjunction with ether, and ether itself when administered by a close inhaler, are equally unsuitable. Limitation of oxygen, which is necessarily incidental to the administration of ether by a Clover's inhaler, throws extra work upon the right side of the heart even in healthy persons, but in such subjects the extra work can easily be accomplished and no signs of cardiac embarrassment will arise. But in patients with mitral regurgitation or obstruction "close" methods of etherisation must be avoided; otherwise, as this case very forcibly shows, a dangerous strain may be thrown upon the right cavities of the heart. The best anæsthetic for such cases is the A.C.E. mixture, or if for any special reason ether seems preferable it should be given by means of a felt cone or a Rendle's mask, in order to avoid all undesirable exclusion of air.

There are two other points worthy of note in this interesting case. The first is that the cyanosis, which had been well marked, as it usually is in alcoholic subjects during the initial stages of the administration, became replaced by a dusky pallor when the patient was thoroughly under the anæsthetic. The second is that the condition of the eyes gave early warning of approaching danger. Given that a patient's complexion is not abnormally pale before an anæsthetic is administered, limitation of air, such as that incidental to the use of nitrous oxide or ether by the customary method, produces what one might almost call healthy cyanosis; and so long as this cyanosis is not associated with pallor we may take it that the

heart is efficiently driving along the imperfectly oxygenated blood. If a patient is naturally very anæmic this healthy cyanosis, if I may use the expression, is not so obvious. Now, if during this cyanotic state the heart begins to fail, the features will lose their bluish or purple colour and become livid or ashy. Such an event, which must always be regarded as indicating danger, is more common under chloroform than under ether, because of the greater tendency under the former anæsthetic for cardiac dilatation to arise. But if the heart of the patient under ether be in a crippled condition it may behave like the healthy heart under chloroform and show signs of failure when any undue strain is imposed upon it. With regard to the other noteworthy point—viz, the warning given by the appearance of the eyes—I may say that whenever the lids are only partly closed and the globes are turned slightly upwards so that more of the sclerotic than usual is visible, attention should be directed to the patient's general condition. These ocular phenomena are liable to display themselves in surgical shock from hæmorrhage or other causes, in asphyxial states, and also when the anæsthetic has been freely, and perhaps too freely administered. Widely open lids with the globes fixed in their normal horizontal axes may be met with in the most satisfactory types of anæsthesia. But flaccid, nearly closed lids, displaying subjacent sclerotics, are usually, though not invariably, indicative of an unsatisfactory condition, and it has been my experience that it is best to give rather less of the anæsthetic under such circumstances; and if the ocular condition depends upon too deep an anæsthesia this treatment will cause the lids to regain their tone and to become approximated. Conjunctival reflex is usually if not invariably absent when the ocular phenomenon to which I have specially alluded is present, but it gradually returns after the lids have regained their tone.

In the next case the patient was a male, thirty-six years of age. He was anæmic and emaciated. The case is one of the two ether cases of the fourth column—that is to say, it was one in which the state of the patient was the primary factor, the operation the secondary, and the anæsthetic the tertiary. The operation was resection of the intestine and lasted forty-five minutes. This procedure is not infrequently attended by a good deal of shock. Ether was employed and it was administered by means of a Clover's inhaler. There were considerable pallor and feebleness of pulse during the operation, and just before it was over the patient's condition was rather critical and he ceased breathing for a short time. In this case, as in the preceding, the eyelids were only partly closed. Nothing was done to restore the breathing, as it soon recommenced spontaneously. But as the patient's condition from the circulatory side was unsatisfactory an injection of brandy was given by the bowel. His condition gradually improved and no further cause for anxiety presented itself.

In the next case, which is of a similar character, the patient was a male, thirteen or fourteen years of age, and the operation was exploration of the upper end of the femur. At the end of an hour he became collapsed. It is not an uncommon thing for children whose general condition is not very satisfactory to show signs of collapse during prolonged operations of this kind, and although one cannot wholly exclude the influence of the prolonged etherisation, this influence is of far less importance. It is in such cases as this and the preceding one that the use of hot brandy-and-water enemata, injections of strychnine, and the intravenous introduction of saline fluids will be found of great use.

The next case is an important one. It is one in which broncho-pneumonia followed the administration of ether. For several years it has been alleged that whilst ether does not kill upon the operating table it does so afterwards, whereas chloroform when it kills does so at the time of its administration; and it has been a very difficult matter indeed to say how far ether is open to objection in this respect. One of the objects which I had in instituting the system of note-taking at this hospital was to put this point at rest. We wish to decide whether the expressions "ether-bronchitis" and "ether-pneumonia" have any right to become current. It will, I fear, take several years before the matter can be finally settled; but I have during this, the first year of our inquiry, taken special pains to find out and follow up those cases in which any bronchial or pulmonary after-effects have arisen, and I hope as time goes on to collect more data. For the present we must not form too hasty a judgment, but must wait till, by the comparison of recorded cases, we can come to some definite conclusions. In the case now under consideration there is no doubt that bronchitis came on immediately after the administration of ether, but whether the anæsthetic was wholly responsible or partly responsible, or whether the bronchitis was a simple coincidence dependent upon other causes, it is exceedingly difficult to say. The balance of evidence is strongly in favour of its having arisen as the immediate result of the administration of ether. The patient was a female, forty-one years of age. She came up from the country and her general condition was good. Her heart sounds were not abnormal and she had never suffered from cough. The operation was nephrectomy for calculous disease of the kidney and lasted forty-five minutes. Although the ether was preceded by nitrous oxide, the case is rightly considered with other ether cases because the preliminary anæsthetic could have had no influence whatever in the production of the after-effects. The ether was administered by an Ormsby's inhaler and the patient was not kept too profoundly anæsthetised. It was, in fact, found that a perfectly tranquil state, free from all rigidity, could be maintained with less than the usual quantity of ether. The conjunctival reflex was slightly present once or twice; there was no cough or straining throughout; and recovery took place in the ordinary way and rather more quickly than usual. The same evening it was noticed that the breathing was audibly moist, and in the course of a couple of days distinct bronchitis developed itself and ran on to broncho-pneumonia. I examined the patient three weeks after the operation and found that there were loud, large rhonchi and moist sounds over both chests, front and back, and distinct dulness at the left base with tubular breathing. The temperature had been irregularly febrile. She was soon transferred to the medical wards, where she eventually died, not from the broncho-pneumonia but from pyæmia apparently consequent upon the original calculous disease of the kidney. At the post-mortem examination the lungs were found to have undergone fibroid changes as the result of the broncho-pneumonia, but it was clear that the patient had died from other causes which do not of course concern us in our present inquiry. In thinking over the facts of the case the following question seems to present itself. Supposing that ether had been changed for chloroform in accordance with the principles to which I referred in the former lecture, would bronchitis have supervened? For the present we cannot, I think, venture to answer this question with any degree of certainty.

There is one other case which should be considered with the preceding one, inasmuch as the dangerous symptoms came on after the administration of ether. It was a case of some anxiety. The patient was a male and ether was administered for putting up a fracture of the femur. So far as the administration of the anæsthetic went, there was very little to note beyond that a great deal of mucus was secreted. When the anæsthetic was discontinued—the inhalation having lasted three-quarters of an hour—the patient seemed as though he were about to vomit. As you know, this is of very common occurrence; but in the case under consideration the patient's jaws became clenched and a good deal of cyanosis ensued owing to the obstructed breathing incidental to commencing vomiting. The jaws were opened with some difficulty, the tongue forceps applied, and the finger passed to the back of the throat. None of these procedures, however, started respiration. The house surgeon therefore very properly performed tracheotomy and directly this had been done a great deal of mucus escaped from the tube. In this case there is no doubt that the asphyxiated condition was connected with the recovery from the anæsthetic. When patients, and especially when certain types of patients are emerging from anæsthesia they may easily become self-asphyxiated. I have already referred to this liability during the induction of anæsthesia and the remarks which I have made are applicable to the stage of returning consciousness. In this particular case the secretion of a large amount of mucus doubtless contributed in no small measure to the obstructed breathing. You will find it an excellent plan in all cases in which such a course is possible to turn your patient well upon the side immediately the anæsthetic is discontinued. By this procedure mucus will tend to flow out of the mouth, the tongue will gravitate into the cheek, and stertor will cease. Patients recover from anæsthesia far better in this position than in any other. Under the circumstances here narrated this lateral posture was impracticable as the

patient had to be kept upon his back. The case, however, teaches us how very necessary it is to carefully watch patients whilst they are emerging from deep anæsthesia and also how important it is that tracheotomy instruments should always be at hand when an anæsthetic is being given.

We next come to the case in which threatening symptoms occurred under nitrous oxide gas. The patient was one year and three months old, and it was proposed to open an abscess of the neck under nitrous oxide, but under the influence of this gas breathing stopped, and the notes state that there was a good deal of laryngeal spasm. This is not uncommon in giving nitrous oxide gas to very young children, for such patients are very easily affected by the absence of oxygen, their muscular systems being thrown into a condition of spasm which may interfere with respiration. In the present instance the patient soon recovered, but I thought it well to mention the case because it shows that you should always be careful in administering gas to small children.

The next case occurred under chloroform and the anæsthetic was the chief if not the sole factor. The patient was a male infant aged five months, and circumcision was to be performed. During the administration of chloroform the pupils dilated and the breathing stopped. Inversion, artificial respiration, and flicking with a wet towel soon restored the patient. Small children are said to take chloroform particularly well, and this is no doubt true, but when once they have been brought under its influence they are very easily overdosed. It is often difficult to obtain anæsthesia because the vapour readily causes the sensitive glottis to close, so that some time elapses before sufficient chloroform enters the lungs; but when once that stage is passed the anæsthetic will be absorbed freely so that very small quantities are needed.

In the next case the symptoms were primarily due to the state of the patient and secondarily to the anæsthetic—chloroform. The patient was a female child and the operation was tracheotomy for œdema of the glottis. A few breaths of chloroform were given and the child ceased breathing and became asphyxiated, the heart beating violently all the time. When the tube was put in and artificial respiration was performed the breathing recommenced. It will be perfectly obvious to you that in giving anæsthetics to patients with obstructive dyspnœa the greatest caution is requisite. The greater the cyanosis the greater the need for caution. In some of these cases the breathing is only kept up by voluntary respiratory action, and natural sleep, save for brief intervals, is impossible. When such a state is present and anæsthesia is induced the patient has to fall back, so to speak, upon his ordinary muscles of respiration which will probably be quite inadequate for maintaining efficient breathing. If, for example, the patient has a large goitre pressing upon the trachea so that there is cyanosis, and more especially if general bronchitis is present, the use of any anæsthetic even in the smallest quantities may at once stop breathing, and it may be impossible, from the flattened state of the trachea, to get a tube into place. This is the kind of case that you may one day be called upon to anæsthetise; and you must under such circumstances seriously consider whether the risk should be run. If the obstruction is such that it would not interfere with the insertion of a tracheotomy tube, the case may be regarded from a totally different point of view, no matter how great the obstruction may be.

The next case is one in which ether was used in the first instance and chloroform subsequently. The patient was a male, aged twenty-two years, in a fair condition, and the operation was nephrotomy. Ether was given by a Clover's inhaler and subsequently chloroform was administered by a Skinner's mask. Under the ether coughing, struggling, and impaired breathing arose, so a change to chloroform was effected. When the operation commenced the pulse was very fair, but during traction and manipulation of the kidney the pulse became feeble and disappeared altogether at the wrist for two or three minutes. This case is very similar to one of those already referred to except that the shock was more marked and for the time very alarming. When the solar plexus is interfered with this reflex cardiac inhibition is by no means uncommon. I am not aware, however, that it has ever been proved to have been fatal. I have known the syncope to become so profound as to arrest breathing for some little while, but the patient recovered. In this particular case the breathing was not interfered with to any extent but the pulse disappeared, as already stated, for two or three minutes. At the end of this time the patient vomited and the pulse gradually returned, but it remained irregular for some time after. In such cases as these, in which the operation must be regarded as primarily responsible, the anæsthetic has very little influence. It is at the present time quite uncertain whether this condition of surgical shock is more likely to occur under ether than under chloroform. I have seen it a good many times under both. It is always advisable in renal operations to be on the alert for such symptoms, to watch the patient very narrowly, and to see that his breathing is freely performed, and that an undesirable quantity of the anæsthetic is not given. I have found by experience that this reflex shock is just as likely to occur during a deep as during a comparatively light anæsthesia.

In the case of anxiety under nitrous oxide and ether the operation about to be performed was for post-nasal growths and enlarged tonsils, and under the influence of these mixed anæsthetics the patient became cyanosed and respiration ceased. Artificial respiration was performed and the operation was finished under the A.C.E. mixture. Whenever a patient has to be anæsthetised for the removal of enlarged tonsils and adenoid growths it is well to bear in mind that conditions are present which are liable to introduce an asphyxial element into the administration. In two at least of the nitrous oxide fatalities which have been recorded enlarged tonsils were present. When the enlargement is very considerable, so that the tonsils almost meet in the mid-line, and even natural breathing is difficult, nitrous oxide should not be given unless mixed with oxygen. In minor cases, however, there is no objection to this anæsthetic *per se*, or as a preliminary to ether, provided that care be taken not to push it too freely. It will be found that the patient will become more or less asphyxiated before he is really anæsthetised, and at this moment the inhaler must be removed, otherwise complete arrest of breathing may take place. The use of nitrous oxide followed by ether has many advantages, but the method requires considerable practice in such cases as I have just indicated.

The sequence of nitrous oxide, ether, and chloroform, to which I more than once referred in the preceding lecture, is specially suitable for operations within and about the mouth, nose, and throat, especially in children and very nervous or hysterical persons. The first-named anæsthetic rapidly destroys consciousness and prevents crying, struggling, or inconvenient hysterical outbursts, all of which are liable to arise with other methods. The second (ether) is valuable, not only because it stimulates the circulation so that it is able to withstand any strain that may be thrown upon it by intercurrent asphyxial states, but because by its use it is possible to "charge up" the patient, so to speak, with sufficient anæsthetic to prevent him regaining semi-consciousness during the insertion of a gag or preliminary examination of the parts to be operated upon. The third anæsthetic (chloroform) is of service because of its convenience and because of the ease with which the comparatively light form of anæsthesia which is advisable in these cases can be maintained.

I should like here to say something about the use of chloroform during nose and throat operations in the sitting posture. Since I have adopted the plan of first placing patients well under the influence of ether I have given chloroform in the sitting posture for a very large number of nose and throat operations, and without ever having witnessed any evidences of circulatory failure. In many of the cases considerable hæmorrhage has occurred and yet the circulation has been well maintained. I am strongly of opinion that provided the patient has first been placed under ether, that every care is taken to avoid intercurrent asphyxia from faulty posture of the head or the accumulation of blood in the fauces, and that only a moderately deep anæsthesia is maintained, chloroform may be safely used in this posture. From the point of view of the operator the sitting posture is very convenient, for the patient assumes the position in which the surgeon is accustomed to examine him in his consulting-room, and the normal relations of the parts remain undisturbed. Moreover, it is such an extremely easy matter to tilt the patient's whole body forwards from time to time for the escape of blood should hæmorrhage be free. So far as the convenience of the anæsthetist is concerned there can be no doubt that for mouth, nose, and throat cases the lateral, or even the perfectly horizontal posture is preferable to the sitting posture; but given that the surgeon prefers the last

named there is no objection whatever to its being adopted and to chloroform being given provided that the points to which I have alluded are carefully borne in mind. The two worst postures for operations of this class are the semi-recumbent (the body sloping backwards at about an angle of 45°) and the dorsal with the head completely extended over the end of the table. Time, however, forbids me to enter more fully into this matter.

The last case I have to consider to-day is one in which posture was the primary cause of the serious symptoms. The patient was a child five years of age, and the operation was for a growth upon the scalp. The patient had to be placed in such a position that his chin pressed against the sternum. Under such circumstances breathing is likely to be interfered with because the tongue is forced back against the pharynx. It therefore happened that respiration ceased and artificial respiration had to be performed. The patient very quickly recovered. As a general rule one may say that the head should be kept as far as possible in a line with the body, no matter whether the patient be lying horizontally or upon his side or whether he be sitting in a chair. Rotation of the head to one or other side does not interfere with breathing provided that no flexion or extension take place; indeed, when patients are lying horizontally this rotation to one side should, whenever possible, be enforced; but flexion of the head upon the sternum or extension upon the spine is liable to bring about difficulties in the administration which may, as in the case before us, require the application of remedial measures.

ON THE HISTORY AND PREVALENCE OF LEPRA IN AUSTRALIA.[1]

BY J. ASHBURTON THOMPSON, M.D. BRUX., D.P.H. CANTAB.,

CHIEF MEDICAL OFFICER OF THE GOVERNMENT, AND PRESIDENT OF THE BOARD OF HEALTH, OF NEW SOUTH WALES; EXAMINER IN HYGIENE AT THE UNIVERSITY OF SYDNEY; FELLOW OF THE ROYAL INSTITUTE OF PUBLIC HEALTH; HONORARY FELLOW OF THE INCORPORATED SOCIETY OF MEDICAL OFFICERS OF HEALTH.

THE following paper contains a summary of the more important parts of "A Contribution to the History of Leprosy in Australia," which was written in 1894, and published by the National Leprosy Fund in the middle of 1897; to that work reference must be made for the detailed evidence on which the statements presently recapitulated rest.

Australia had been often sighted by navigators before Captain Cook landed and took possession on behalf of the English Government in 1770; but the first foreign settlement in the country was effected by an expedition which numbered about 1030 souls at Botany Bay, near Sydney, in 1788. The whole continent had, it is believed, been free from intrusion in every part down to that date with the following possible exceptions: in 1837–39 Sir George Grey, Governor of South Australia, discovered some rock-drawings which were judged to be of other than aboriginal execution at a point near the north-western coast line; and on the north coast, Flinders, issuing from the Gulf of Carpentaria, encountered a fleet of Malay prahus engaged in tripang fishing and was told by its leader that he was the first Malay to reach that coast about twenty years before, or about 1783–84. For many years at all events the aboriginals at this part remained at enmity with their Malay visitors, who returned year by year, and, according to the available accounts, did not penetrate further than the beaches, where they usually had to fight for the wood and water they went to secure. At discovery by the whites the country was found parcelled out among many different small tribes and it is considered that the state of the people must have been what it was found to be in 1788 for several hundred years before. No information as to the absolute numbers of the nomad autochthonous population at any part of the country is available for older years and no trustworthy information is available for later times. Sydney was the original seat of Government for the continent and for many years was consequently the repository for all archives touching Australia and Tasmania, Tasmania being usually reckoned a part of Australia, from which it began to be separated by the rather narrow Bass Strait only during tertiary times. The collection of books touching this country in the public library at Sydney numbers about 5000. Gentlemen officially concerned in tabulating and preparing the old official archives for the press are of opinion that there is no mention of leprosy down to the year 1836 at all events or of any disease under which lepra might be supposed to lie hid; on the other hand, information as to all diseases down to that date and for long afterwards is extremely meagre. The works of several explorers of note which deal with wide tracts of country on different parts of the continent, and which were written from about 1830 onwards, contain no reference to anything resembling lepra among the autochthons with a single exception; and in that case there is nothing to show that the word "leprosy" was not used in its banal sense, the writer, who was not a medical man, probably intending merely to emphasise the disgusting character of some skin disease. Several explorers of note have informed me that they have never met with any disease among the aboriginals which they supposed might be leprosy; nor, after looking at many photographs of lepers, did they hesitate to adhere to that statement. Among these gentlemen was the late Baron Sir Ferdinand von Mueller, K.C.M.G., M.D., F.R.S., &c., who spoke chiefly of the south-western part of the continent about the year 1847 and of a part of the Northern Territory about 1855. It may be taken, in my opinion, that there is no record of lepra among the primæval autochthons in any part of the continent.

Comprehension of the progress of white settlement will be facilitated if it be remembered that Australia has an area of just three million square miles, that the earliest Government at Sydney was the Government of Australia, that distant parts were settled by sea as became possible and were gradually erected into separate Crown Colonies, and that all these Crown Colonies, always including Tasmania, were at different dates granted the right of self-government and thereby became autonomous States. The net result has been that Australia is divided into the following territories, which became self-governing at the dates mentioned: Tasmania, 1854; Western Australia, 1890; South Australia (with which is the Northern Territory), 1856; Victoria, 1851; New South Wales, 1851; and Queensland, 1859. For the first sixty to sixty-five years the population was practically entirely English. In 1851 the discovery of gold led to the immediate influx of large numbers of people who came from almost every country and from almost every recognised leprosy area in the world to New South Wales and Victoria. These natives of recognised leprosy areas were in small proportion to the rest of the population, if the Chinese (of whom further mention will be made below) be excepted, and no occurrence of lepra among them has been recorded. The total population of Australia at the dates at which the various territories were granted responsible government was not so much as half a million; at the present day it is about four millions. The conditions of life in this country are extremely favourable to health. The earliest settlers no doubt endured similar hardships to those necessarily suffered by explorers in later years, for they were themselves in the position of explorers; but without going into detail it is indisputable that the condition of the population as a whole and in every territory has been and still is one of ease. Food, which continued to be of precisely the same kinds as they had been accustomed to in England, was always wholesome and sufficient even when it was not plentiful. There is no malaria in any of those parts of Australia which thus far have become populous, the exception being the very sparsely inhabited north. Lastly, the climate, speaking generally, is as good as can be imagined, and while the temperature necessarily varies greatly between parallels of S. latitude so widely separated as are the 44th and the 11th, it is in every inhabited part such as encourages out-door habits of life. Nothing at all is traceable in the circumstances of life in Australia such as possibly might have importance in relation to occurrences of lepra. In 1851 this healthy, small, and widely-scattered population was composed in the main of Europeans and chiefly of English. The aboriginals retired before them and died apparently almost in proportion to the degree in which they were forced

[1] Abstract of a paper presented to the Lepra Conference, Berlin, 1897.

into close contact with the whites. They never were either of importance as enemies or of use as servants. Besides the aboriginals there was, of course, among the whites even at that date a quite small proportion of persons belonging to the miscellaneous nationalities of which representatives are to be found in every port. There is some statistical evidence that they were at some points numerous enough to be separately counted at the censuses and yet they were in quite inappreciable proportion to the total population. But in the year named the discovery of gold caused an influx of large numbers of Chinese. Towards the end of that decade there were no less than 42,000 of them in Victoria and in 1861 there were 12 000 in New South Wales; in 1881 the numbers in both of these, the richest and most populous territories of Australia, became about equal and were about 10,000. Chinese appeared also, though in far less number, in all the other territories; but it is not possible to ascertain when they first appeared and at what rate they increased (at least, during earlier years), for they were seldom distinguished in the census abstracts. Thus in 1863 both they and members of other coloured races were scarcely known in Tasmania; they were present in noticeable number in 1875; they were first distinguished at the census of 1881 and then numbered 844, and in 1891 had increased to 943. In Western Australia they were first distinguished in 1881 (145), and there were 917 in 1891, but there is no doubt they were present before the first-mentioned date. In South Australia Chinese were a curiosity in 1860; they were distinguished at the two latest censuses and then numbered 321 and 288. In Queensland there were some Chinese as early as 1853; "natives of China and Japan" were enumerated (538) in 1861 and increased to 10,000 in 1876 (but they were nearly all Chinese); the Chinese were separately enumerated in 1881 (11,000) and numbered 8522 in 1891. Chinese appeared in the Northern Territory in or shortly after 1872; there were 2722 in 1881 and 3447 in 1891. Now in all those territories the danger from imported lepra to the white inhabitants lay with the Chinese, and (with the exception of Queensland) with Chinese alone. In Queensland, which is a sugar-growing country, large numbers of Kanakas have been introduced from various lepra-infested groups of islands in the South Seas to work on the plantations; they began to arrive in 1863; they increased from 1543 in 1868 to more than 11.000 in 1881, thereafter decreasing to between 8000 and 9000 in 1891. There have never been other than casual—almost, it may be said, individual—Kanakas either in New South Wales or Victoria and none at all elsewhere. As regards possible importation of lepra, then, it is quite certain that the people of Queensland ran risks both from Kanakas and Chinese, but those of New South Wales and Victoria (and the remaining territories) from Chinese alone. The occupations followed by the Chinese always included cooking, market gardening, peddling, &c., as well as mining. In earliest years they were almost always employed in the first-mentioned businesses and in stores; during the middle period the largest proportion of the total were occupied in placer gold-digging; in latter years the proportion of miners among them fell and probably the larger portion present followed one or other of the trades. They have always been perfectly free within the country and lived and travelled where they liked. They live largely by themselves, at gardens and in particular quarters of towns and cities, but they mix freely with the whites. The cooks alone, as a rule, are employed in the houses of the whites and then at hotels and boarding-houses. The relations of the Kanakas to the whites are slightly different (in Queensland). They were imported under a contract to work for so many years at the end of which they were to be returned to their islands if they chose; but if they preferred to remain they could either re-engage themselves to work as "free boys" at the plantations or else could set up in some semi-labouring business. Whichever they did the free boys were at liberty to travel about the country and were not infrequently employed as house servants. In all the territories the Chinese, and in Queensland the Kanakas as well, were pretty equally diffused among the whites all over each territory and were in free occasional or business contact with them.

From this review of the general conditions of life it is necessary to turn to the recorded occurrences of lepra. Before doing this it should be noticed that an epidemiological study of the present kind can be made only if two conditions are first fulfilled: one is that the information at command shall be complete enough to furnish a true outline (at least) of the course followed by the disease among the people which is the subject of study; the other that there shall be reasonably good evidence that the persons reported to have suffered in former years from the disease under examination really presented cases of that disease. In the present instance it is my opinion that the first condition has been fulfilled; the second has probably been sufficiently well fulfilled, but with this exception, that while it is plain enough (from published accounts, photographs, and in one case proficiency in the observer within my own knowledge of him, &c.) that the cases of lepra alleged to have occurred were cases of lepra in reality, it is, on the other hand, almost certain that many additional cases have either escaped recognition altogether or else were never put on record. Here, also, it seems proper to point out that while the diagnosis of lepra only occasionally presents difficulties which cannot be resolved by an attentive student who has enjoyed sufficient opportunities of making himself familiar with the varied clinical aspects under which the disease shows itself, yet it is notorious that persons who in other respects are highly competent, but who have not had the opportunities referred to, very often, indeed, overlook or misapprehend examples of the disease the identification of which presents in reality no difficulty at all and even deny or dispute that they are cases of lepra when that explanation of them is suggested. It is most important to remember this and it should be specially borne in mind when the negative statements of travellers, both medical and lay, are under consideration. The assertion of a known proficient that he met with no cases during his exploratory travels is good as far as it goes at all events; a similar statement from one of whose proficiency there is no evidence is worth nothing at all.

As regards lepra among the Australians it is necessary to divide them into primæval autochthons unaffected by immigration and those affected by immigration, who may be called aboriginals for the sake of distinction. Concerning the primæval autochthons there is nothing but negative evidence; lepra has never been observed among them. Nevertheless the Australian is susceptible of lepra and it has been seen among aboriginals. In 1892 an aboriginal full-blood male leper was recorded at Maryborough, Queensland (South Latitude 25°, East Longitude 154°); he roamed over the country in the neighbourhood of the town named with the remnants of his tribe. There are sugar plantations there and for many years there have been Kanakas at work upon them; no other aboriginal leper was discovered there; there is positive information that one Kanaka leper (only) has been seen there. It must be said here that the information available regarding every part of Queensland is extremely meagre. The nature of the illness suffered by the Kanaka was not recognised by the man who reported it, but was easily identified by the photographs he appended to his account of the case, and it is quite certain (from the number of Kanakas who have been employed there during a long term of years) that many cases must have occurred which have remained unrecognised. In 1894 an aboriginal suffering from leprosy was received at the lazaret at Port Darwin (about South Latitude 13°, East Longitude 132°) his disease being then first diagnosed; I discovered after some search that he was known (by a layman) to have been ill since 1879. After further inquiry I satisfied myself that the Government Resident on the MacArthur River, N.T. (about South Latitude 16°, East Longitude 137°), which debouches on the west side of the Gulf of Carpentaria, had observed cases of leprosy among aboriginals in that neighbourhood during years immediately following 1888; two cases were mentioned, those of a man and a woman (the latter being the only case of a female aboriginal leper thus far brought to light), but it was not stated that those were all which had been seen. From the letters of still other lay correspondents it became apparent that lepra had been observed among aboriginals inhabiting the country watered by the Alligator rivers, N.T. (about South Latitude 13° to 15° and East Longitude 132° to 134°); probably their number was considerable. Early in 1895 a male aboriginal was taken into Port Darwin from the Alligator country and his case was identified by the Government medical officer in charge there as being one of lepra nervorum; thus the lay accounts—in themselves scarcely mistakeable—were to some extent corroborated by medical opinion. Noteworthy points in this connexion are the very late date at which the first case of lepra in an aboriginal was noted—namely, in 1892; and while it seems likely that

lepra must have existed among the aboriginals at several points of the Northern Territory (which, by the way, has an area of nearly half a million square miles) for a good many years, yet it would be presuming a little too far to take it that it occurred among them while one or other tribe of them might be regarded as in their primæval state. On the other hand, if imported to them, it must have been by one of two races, either by the Malays, a contingency which under all the known circumstances seems to me at least remote, or by the Chinese at some date later than 1872. Here the vast extent of the area over which the infected tribes extend must be remembered; and that while these tribes were not in contact with any town the Chinese, on the other hand, spread only over those comparatively small areas on which employment or gold could be found in conditions (of neighbourhood to whites) which would make their prolonged stay profitable. Were it granted that they might have been infected by the Chinese still it is difficult to see how the opportunity for communication came about. Lastly, there is nothing of an evidential nature to warrant connexion of their infection rather with the Chinese in recent years than with the Malays in older times or *vice versâ*.

The question whether lepra was indigenous to any part of Australia is so important that it has seemed necessary to go into some detail in speaking of occurrences of the disease among the aboriginals. But it remains unanswered for the present in my opinion; yet as the foregoing information is at this date entirely new it is possible that more light may be thrown upon it as time goes on and attention is more steadily directed to it. This branch of the subject, then, must now be left aside and the incidence of lepra on the whites and on foreign immigrants must be examined.

I go on to speak of other parts of Australia, and of leprosy among native-born whites, immigrant whites, and coloured aliens. No cases have ever been observed in Tasmania or in South Australia. Only two, both in Chinese, have been observed in Western Australia. There have been many recorded cases both in whites and coloured aliens (Chinese and Kanakas) in Queensland; but the list is beyond doubt remarkably short of the fact as regards the latter. It is probably deficient there as regards the whites, too, to what extent cannot be guessed, and that it is deficient is but an inference from the known facts, though a very strong one. There remain, therefore, New South Wales and Victoria, for which territories the information, though doubtless incomplete, is yet in all probability sufficiently full for practical purposes. The epidemiology of lepra in these two territories presents a problem of great interest. Although I shall probably not have occasion in this account to refer again to Queensland it is, nevertheless, sufficiently interesting to be noted that the first case of leprosy in Australia of which there is evidence was encountered there, the late Dr. Bancroft having discovered the history of the illness of an aged Chinese in old case-books of Brisbane Hospital. Though the nature of the case was not recognised at the time (1855) the description was to his mind (and after reading the original MS. is to my own) sufficiently clear. The first case of lepra in a white native of which there is record was observed and identified by myself, the patient still surviving[2] and presenting an example of healed lepra nervorum with consecutive neurotrophic changes; the date of attack was 1856.

The epidemiology of the disease in New South Wales may be summarised as follows. Between 1856, when the first case in a white occurred, and 1882 no less than fifteen cases in whites are known to have been met with, the dates of attack being ascribed to eleven of the years in that series of twenty-seven years; and during that term only one West Indian, who was observed under confinement in a lunatic asylum to be suffering from lepra nervorum, and one Chinese, a patient in a general hospital, also affected with lepra nervorum, were noted in 1859 and 1861 respectively among immigrants from leprosy areas. During the years from 1882 to the present date many cases in coloured immigrants and in whites were recorded, so that during those twenty-seven years a good many cases were observed in whites and in coloured immigrants only two cases. In Victoria the course of events was exactly contrary. From 1858 (and apparently from two or three years earlier) the presence of Chinese lepers was known and officially recorded; their number nevertheless remains doubtful. It is certain there were several in 1858; thirteen were recorded at a date subsequent to 1863, thirty-one were enumerated in 1866, and from the records it is apparent that there were always several Chinese lepers scattered over the territory down to 1889. Between 1863 and 1867 a white leper was noted, but he had lived ten years in India, and it was clearly stated he had acquired his disease there. No other white case was observed until 1884 (attacked in 1879) and this patient was a native of New South Wales who had lived from 1859 to 1867 in Sydney, where he was born, and then in New Zealand (an old leprosy area) until 1874, when he arrived in Victoria. A third case was observed in a white in 1891; he had been born in India and until his arrival in Victoria in 1885 had been a sailor trading in the east; he was attacked in 1889. So that while many cases in Chinese have been observed and recorded in Victoria between 1858 and the present date, there never has been noted any case in a native Victorian nor any in whites but such as were (as to two of them), or may have been (as to the third) imported after acquiring the disease. Secondly, it is to be observed that during nearly all the years dealt with lepers were on both these territories entirely free and unrestrained, whether they were white or coloured. In New South Wales some provision was made for the isolation of a few coloured lepers who had become helpless and destitute and who were therefore isolated voluntarily in a sense in 1883; during the following years one or two others were isolated under indirect pressure as well as some more who came in as being helpless; but it was not until 1890 that by Act of Parliament the forcible detention of those already in captivity was made legal and the reporting and detention of all cases which might be detected for the future were made compulsory both on medical men and on the public. And in this respect of isolation the course taken in Victoria was almost the same. Somewhat before 1888 there were two or three helpless lepers isolated voluntarily and in that year it was made legal to remove to a lazaret and to detain there any newly-discovered leper. But this could be done only if two medical men certified and reported; that is, if two physicians chose to take that course then the central authority might (again if they chose) forcibly remove the leper so reported; but no compulsion to report or to isolate lepers was laid on anyone. It was not until 1893 that notification and isolation of all cases of lepra were made compulsory in Victoria.

I repeat, then, that it is clear beyond all doubt that there were many foreign lepers in Victoria from 1858 onwards and that they were entirely uncontrolled, but no native white leper was ever recorded or detected according to the result of very extensive inquiries made not merely in official quarters but of individual medical men still surviving and practising from the earliest date mentioned. On the other hand, it is equally clear that from about the same time there were a good many white lepers in New South Wales long before any important number of cases among Chinese or other immigrants had been observed; and more than this, the disease died down—almost died out—in Victoria before notification became compulsory; so that on the whole it may well be said that if lepra can be diffused by lepers then it seems as though there were something about Victoria which prevented the imported infection from "taking" there. Thus the most that can be suggested by way of adverse comment on these statements is that cases probably did occur among Chinese, &c., in New South Wales during the long series of years before 1883, although they were not observed, recognised, or noted, the fact appearing in any case to be that the infection did take in New South Wales, but refused to take in Victoria on the white inhabitants.

There are a few other points which must be noted here; they are, first, that there has never been any such prevalence of leprosy among the Chinese in either territory as might fairly be expected of a communicable disease occurring among a people who habitually live at extremely close quarters with each other and who, according to my observation, show no particular fear of that disease; and, secondly, that most of the native-born white lepers in New South Wales have not merely never associated with coloured people of any race, but have certainly never been in conscious contact with any leper. The number of Chinese in Victoria was vastly in excess of the number in New South Wales down to 1881; the total population of the two territories, which march together, was at every date practically equal, but the area of Victoria being 88,000 square miles and that of New South Wales being above 310,000 square miles considerations attaching to density would seem to be in favour of spread in Victoria; there is a difference of five degrees in the mean annual temperature. Lastly,

[2] See Annual Report on Leprosy, Board of Health, N.S.W., 1895, Case L.

there are no other differences (political or social) between the two. I point out that the remarkable features of the case thus briefly described exist only in as far as the evidence from which they have been drawn is adequate to establish them as facts, and that for that evidence, which is necessarily lengthy, reference must be made to the writing which was mentioned at first and which concludes with the two following expressions of opinion: "1. Although lepers were imported to Victoria steadily during a long term of years and in considerable number and although they always remained entirely unrestricted in their movements among the whites no Victorian native white who had never left the colony has ever been attacked. Moreover, the disease died away in Victoria quite independently of restrictive measures against the liberty of lepers, which in fact were first taken only in March, 1893. 2. Although coloured aliens of many different races, all of which have furnished cases of leprosy in Australia, have been imported during many years and in large numbers to all the better populated part of the country which extends along the coast-line from about the 146th degree of East Longitude, easterly and then northerly towards Cape York (Victoria, New South Wales, Queensland), and although native whites who had never left their colony have been attacked at various places in New South Wales and Queensland, there is no evidence and no good reason for surmising that any such native white has been attacked who lived south of the 35th parallel of South Latitude (part of New South Wales and Victoria)."

Sydney, New South Wales.

THE OPEN-AIR TREATMENT OF PHTHISIS IN ENGLAND.

BY F. W. BURTON-FANNING, M.D. CANTAB., M.R.C.P. LOND.,

PHYSICIAN TO THE NORFOLK AND NORWICH AND JENNY LIND HOSPITALS.

THAT many cases of phthisis are susceptible of cure and that a still larger number can be restored to comparative health are facts which cannot be too strongly insisted on. Convincing evidence as to the truth of these statements is forthcoming. "Pathological anatomy," says Carswell, "has perhaps never afforded more conclusive evidence in proof of the curability of a disease than it has in that of tubercular phthisis." According to different observers from 4 per cent.[1] to 9 per cent.[2] of persons dying from other causes manifest post-mortem evidence of arrested tuberculous mischief in the lungs and such spontaneous cure was found in 38 per cent.[3] of a number of necropsies which included some cases of ultimate death from phthisis. Moreover, most physicians can recall instances of undoubted phthisis in which recovery has been observed to occur with maintenance of health for an indefinite period. Though some of these cases have falsified their attendants' expectations and cannot be ascribed to the adoption of any particular therapeutic measures, yet a far larger number owe their improvement to rational treatment directed against their malady. "There is nothing more baneful than the idea that phthisis is incurable. It shuts out all honest attempts to do everything possible and to make every sacrifice to promote arrest and cure."[4] The diminished mortality from phthisis during recent years affords encouragement to those concerned in the prevention and cure of the disease. Dr. Ransome[5] shows that the death-rate of phthisis has steadily declined from 38 per 10,000 living in 1838 to 14 per 10,000 living in 1894. He draws a parallel in this respect between phthisis and leprosy.

Not only do statistics prove that the annual number of deaths from phthisis is decreasing, but in the opinion of many old practitioners the type of the disease has undergone a change. They consider that the common form of the disease is nowadays less unfavourable than it was some years ago. Another very important factor in the lessened mortality from phthisis is our better means of detecting the disease in its early and curable stages. The examination of the sputum for tubercle bacilli in those cases where the physical signs are absent or of doubtful significance has proved of inestimable service. It will also be acknowledged that our treatment of the disease has improved though not at the same rate as our general knowledge of its nature. Nevertheless, phthisis still ranks as our chief national scourge and in 1892,[6] which year gave the lowest mortality from phthisis then recorded, it carried off 43,323 persons in England, accounting for about one-twelfth of all deaths. Of the whole living population 14 or 15 per cent[7] are said to be affected with phthisis. It must also be stated that Dr. Niven[8] and others think that the reduction in the number of deaths from phthisis is not altogether free from fallacy and is partly due to "better diagnosis and change in nomenclature." At all events there is no subject of greater importance than that of the treatment and prevention of phthisis and it has attracted a host of scientific workers in every civilised country. Whatever the precise reduction in the mortality from phthisis in England may amount to it is generally allowed to have been chiefly brought about by the improvement of the conditions under which the people now live—pure air, greater cleanliness, and better food. These are the lines on which the "open-air" treatment of phthisis proceeds.

The importance of fresh air to the sufferer from phthisis was to some extent recognised by very ancient writers. Aretæus says: "Living by the sea will be beneficial." Hippocrates, Celsus, Galen, and others also utilised climate in their treatment of the disease. My fellow citizen, Sir Thomas Browne, pertinently remarks[9]: "Some think there were few consumptions in the old world, when men lived much upon milk, and that the ancient inhabitants of this island were less troubled with coughs when they went naked and slept in woods and caves than men now in close chambers and feather beds." About the same time Sydenham wrote: "Nor does bark cure ague with greater certainty than riding does consumption." Smyth in 1787 advocated the "utility of the swing in pulmonary consumption." But, as Dr. Tucker Wise points out, one of the first to really grasp the fundamental principle as we now consider it of the treatment of phthisis was Dr. Bodington,[10] of Warwickshire. This practitioner wrote: "To live and breathe freely the open air without being deterred by the wind or weather is one important and essential remedy in arresting its progress." His remarkable essay also contains the following statements: "The cold is never too severe for the consumptive patient in this climate," and "Sharp, frosty days in the winter season are most favourable." Sir James Clark[11] especially dwells on the value of pure air in the prevention of phthisis and mentions an instance of an outbreak of scrofula being stopped by proper ventilation. Dr. Henry MacCormac[12] makes a vigorous claim to the discovery of the cause of phthisis. "Wherever the air habitually respired has been respired in whole or in part before, tubercular deposits are found, and whenever the air habitually respired has not been respired in whole or in part before, then tubercular deposits are impossible and consumption and scrofula unknown." Tubercle in the lung is explained to be "the metamorphic carbonaceous waste" whose proper congress with uncontaminated oxygen has been barred. An immense number of cases are related in which the one common condition was confined air, and Dr. MacCormac especially inveighs against sleeping chambers whose windows are hermetically sealed. Though his writings deal rather with the prevention than the cure of phthisis one remarkable recovery is described. "A youth, a collapsed shred of skin and bone, apparently coughing, spitting, sweating the last poor remnant of his life away. I made his father wrap him up in blankets and carry him out of doors twice or thrice daily; his sleeping chamber I had wind-swept; a perfect recovery was made."[13] Dr. J. H. Bennet held that phthisis was a disease of debility and should be combated by means of hygiene, climate, and tonic medicines. He directs the phthisical patients "to be in the open air as much as possible." The teachings, however, of Sir James Clark, Dr. MacCormac, Dr. Bennet, and others failed to convince the public (and even the bulk

[1] Heitler: Wiener Klinik, 1879.
[2] Fowler: Arrested Pulmonary Tuberculosis.
[3] Harris: Brit. Med. Jour., Dec. 21st, 1889.
[4] Dr. Weber: Croonian Lectures, 1885.
[5] THE LANCET, July 11th, 1896.
[6] Registrar-General's report.
[7] Harris and Beale: Treatment of Pulmonary Consumption.
[8] Brit. Med. Jour., April 3rd, 1897.
[9] Letter to a Friend.
[10] Essay on the Treatment and Cure of Pulmonary Consumption, 1840.
[11] Influence of Climate, 1846.
[12] Consumption, 1865.
[13] Treatment of Pulmonary Consumption, 1866.

of the profession) of the fallacy of studiously guarding phthisical patients from a liberal supply of fresh air.

Within recent years climate has come to occupy the foremost position in the treatment of phthisis and the weight of opinion leans especially in favour of the elevated resorts. At the same time almost equally favourable results have been produced by most diverse climates and one can but conclude that the only essential requisites of a climate for phthisis are that its air be pure and bracing and that it allows the patient to spend the greater part of his day out of doors. Lastly, we come to the method systematised by Brehmer in 1860 practised by him at Goerbersdorf, by Dettweiler at Falkenstein, and by followers at some twenty similar institutions on the Continent. Brehmer maintained that a more important point than climate was the use made of it and in the so-called "open-air," "Heilanstalten," or "Sanatorium" treatment sole reliance is placed in general hygiene. This includes perpetual existence in the open air, diet, hydro-therapy, and a strict medical supervision of the patient's daily life. This plan, then, which I have attempted to carry out in England, makes open air the essential point and not a mere adjunct to other principles. Descriptions of this method, as carried out in the German sanatoria, have lately been given by Dr. Walters[14] and by Dr. Hess[15] and I would also refer those requiring fuller information to the works of Léon-Petit, Knopf, and Jaruntowsky (translated by Dr. Clifford Beale). Stated briefly the inmates of these institutions pass from seven to twelve hours every day in the open air in all weathers. They recline in long chairs, well covered with rugs and furs and protected from wind by various forms of shelters. The same excess of fresh air is supplied during the nights and all bedroom windows are kept continually wide open. In the matter of exercise considerable divergence of opinion exists in the various sanatoria. Brehmer was a great believer in exercise and at Goerbersdorf graduated walks and ascents are made use of by the patients. Dettweiler, on the other hand, keeps the inmates of Falkenstein perpetually at rest and the prolonged adoption of the recumbent position is thought almost as important as open air. Great stress is laid on the feeding of the patients and milk of course forms an essential item. The open-air life usually suffices to restore the jaded appetite, but the force of discipline and the study of the individual's taste are also relied on. Baths and douches of different temperatures are used every day and are followed by vigorous friction or massage. This treatment of the skin not only invigorates the patient, but plays some part in producing the desired "hardening." Lastly must be mentioned an essential point in the conduct of these establishments—the discipline and medical supervision that are exercised. The results achieved by the sanatoria have apparently but little to do with the climates of their localities. Brehmer, it is true, thought that climate was of some consequence and demanded that the sanatorium be situated in an elevated region and in one where phthisis is uncommon. Other authorities, however, deny that climate plays anything more than a secondary part and hold that so long as the open-air treatment is rigorously carried out the locality is not of much importance. If climatic conditions are favourable make use of them they say; if unfavourable meet them with suitable contrivances. Perhaps the most popular of these institutions is that at Falkenstein and there the climate is by no means particularly favourable, for mist, rain, and extreme cold are frequently experienced. Dr. Hess[16] writes: "Falkenstein does not owe its success to its climate ..... nor is it to its height, for at lower lying institutions and those at a higher level, where the same principles are in vogue, as good results are achieved." The bearing of the above considerations on the practicability of applying this treatment in England is obvious. Coming now to the results obtained by the sanatorium treatment, statistics from Goerbersdorf are published which extend over eleven years and include 5032 patients whose cases have been followed up. Of this number 551, or 11 per cent., were "cured" and 788, or 15·6 per cent., were "nearly cured." The Falkenstein figures are more recently given and show a slightly better result, for from 14 to 15 per cent. are said to be "absolutely cured" and nearly as many "comparatively recovered," while a very large number are benefited more or less, and this notwithstanding the fact that the treatment is by no means limited to very early cases. After a lapse of from three to nine years three-fourths of the "cures" remained well; 142 days was the average time spent in the sanatorium by these patients.

It is undeniable that the profession generally in England have been slow to appreciate the merits of this method of dealing with phthisis. Quite recently, however, considerable interest in it appears to have been roused and especial mention may be made of the prominence of the subject in the discussions of the British Balneological and Climatological Society. Attention has been repeatedly directed to the urgent necessity of providing sanatoria for the open-air treatment of phthisis in our own country. Dr. Hermann Weber's Croonian Lectures of 1885 contained a vigorous appeal for the more serious use of the "air-treatment" here. He expresses the opinion that "fear of the inclemency of the weather is far too great amongst the public as well as the profession" and that patients should be directed to spend the greater part of most days in the open air, arrangements being made to shelter them from wind and rain. There is a tendency, he says, to confine phthisical patients too much to bed and to allow them too little fresh air. A "fruitful source of phthisis is the tendency to catarrh of the respiratory mucous membrane. It is not to be treated by confinement to hot rooms ..... but by hardening and accustoming the delicate person, clothed in flannel, to constant exposure to the air in almost all weathers." Dr. Weber especially pleads for the institution of a number of small hospitals in England with balconies where a bed could be placed and with verandahs and revolving shelters; these should be under the supervision of a resident medical man who would enforce and regulate the treatment. Dr. C. T. Williams[17] "believed that results as good, if not better, than those afforded by many foreign places to which consumptives were sent might be obtained by the more thorough employment of the open-air treatment in English resorts." He appealed for assistance in carrying out the practice in our own winter resorts and complained of the tendency invalids had to remain indoors with closed windows during the winter, being deterred too much by a shower of rain or an east wind from enjoying the fresh air. Dr. Squire maintained that "the open-air treatment of consumption could be satisfactorily carried out in this country." Among modern text-books on phthisis that by Dr. Ransome and that by Dr. V. D. Harris and Dr. C. Beale give a full account of the open-air treatment of the disease and advocate its wider application in this country.

During several visits to the health resorts of the Swiss Alps and of the Riviera I learnt that the local physicians were becoming more and more of opinion that sole reliance should be placed on keeping phthisical patients perpetually in the open air and that they claimed no specific effect whatever for the climatic conditions of their various localities beyond such factors as the pure and bracing qualities of the air, its dryness, and the amount of sunshine. A visit to Davos, with the spectacle of its phthisical patients spending the whole day and some hours of the night reclining on their balconies, with the thermometer many degrees below freezing point, and the fact that they make most satisfactory progress under these rigorous conditions, serve to assure one that the mere cold of our winters constitutes no objection to the adoption of the treatment in England. For many years now the profession has been convinced that most phthisical patients do better in a cool and bracing climate than in a warm and relaxing one. How far the other factors of our English climate, especially the number of rainy and sunless days, would prove disadvantageous I determined to cautiously test. I must here state that this determination was the outcome of conversations with Dr. Michael Foster, of San Remo, and with Dr. Huggard, of Davos, and I take this opportunity of gratefully acknowledging my indebtedness to them. To Dr. Foster I am under a further obligation for much help and criticism bestowed during the progress of the work he helped to initiate. The experiment has been made at Cromer, where a convalescent home has been erected for the use of the patients of the Norfolk and Norwich Hospital. Here since the spring of 1895 I have had six phthisical patients at a time carrying out the open-air treatment. To save repetition I will describe at once shortly the daily

[14] THE LANCET, Aug. 14th, 1897.
[15] Practitioner, November, 1897.
[16] Practitioner, Nov., 1897.
[17] Transactions of the British Balneological and Climatological Society, 1896.

routine followed by all these patients. The home stands in three acres of ground, on the outskirts of the town of Cromer, about 250 feet above, and a quarter of a mile from, the sea. There are a verandah and a summer-house conveniently situated with regard to the prevalent winds and I have had erected in the grounds a shelter with two moveable side walls, which consist of panels of wood and glass. These are placed in position each morning after the direction of the wind has been observed. The patients adjourn to one or other of the shelters at 8.30 every morning and pass the rest of the day there in long chairs. When the other work of the home permits their meals are brought to them outside. As a rule they come indoors at sunset, but on particularly dry nights both in winter and summer they have remained out of doors till 10. Besides warm overcoats they are enveloped, in cold weather, in one or more rugs and great

ILLUSTRATION OF SHELTER.

use is made of sacks thickly lined with wadding, into which they put their legs and to which when required a hot-water bottle is added. If the patient feels the cold he is instructed to use an additional wrap and if that is insufficient he is brought inside. Moderate evening fever (below 102° F.) has been considered no contra-indication to following the treatment in its entirety. Not only have I seen no harm follow exposure to the open air while the temperature was raised, but I think that reduction of evening fever is one of the effects to be most confidently anticipated from this hyper-aeration. Though I have not had such cases at Cromer, those in the last stages who are too weak to leave their beds should have the same sort of treatment on a balcony or by an open window. I anxiously watched my earlier patients lest they should develop pleurisy, pneumonia, or some other complication attributable to cold, but am now assured that they run no special risk of these. For catarrhs of the nasal and bronchial passages they were not kept wholly indoors, but were made to avoid the slightest damp. Several patients discovered for themselves how far less prone to colds they soon became under this life. The treatment is commenced more or less tentatively with each patient; during the first week or two they only sit out on good days and it is ascertained that they easily keep warm. No difficulty has been experienced in the gradual acquirement of the hardness necessary to withstand colds and catarrhs. The night is passed in a large room with widely opened windows. As far as one sign goes I think the observation of the patient's circulation forms the best guide to his management. The question of perpetual repose or of exercise has in the first place been decided by the strength of the pulse. After carefully watching patients under conditions of moderate exercise and of absolute rest I have satisfied myself that the latter should be enforced for those who have any perceptible weakness of the pulse. I am inclined to think that one of the chief disadvantages of attempting the open-air treatment in the patient's own home is the difficulty of enforcing this perpetual rest. The great cause of cardiac weakness in phthisis is the degeneration of heart muscle brought about by prolonged fever, even if this only obtains during some hours of each day. Open-air lessens this fever, as we shall see, and thus checks further cardiac degeneration, and also by its tonic effects on the system repairs slowly the damage already done. This is, I believe, materially assisted by complete rest and I have watched improvement of the pulse occurring steadily during

many months of this treatment. Not only has the pulse strengthened on the abandonment of any exercise, but the digestion and general vigour have also improved. With this condition of weakened heart these patients commonly manifest cold and blue extremities; they require careful watching and the use of additional wraps, foot-warmers, or doses of brandy. Digitalis has also been used with advantage in these cases. No routine use of drugs has been made, but all symptoms and intercurrent ailments have been treated as immediately and appropriately as possible. An ordinary linctus has been given for excessive cough and to help sleep; when necessary, rhubarb, gentian, or soda, &c., have been administered to help digestion, and cascara or other aperients have been used for constipation, which this treatment somewhat tends to induce. I need hardly say that the strictest injunctions were given as to the disposal of the sputum; the patients were provided with proper spittoons in which all expectoration was received and kept moist. The general dietary of the home had to be adapted for the phthisical patients. It consisted of bread-and-butter and cocoa for breakfast, with bacon in addition twice a week; a glass of milk at 11; meat, vegetables, and pudding for dinner, with milk or stout; bread-and-butter and cocoa for tea; and bread-and-butter and milk for supper. Nothing has been more gratifying or striking to those watching this treatment than the complete conversion of the patients themselves to it. They were admitted to the home on the understanding that they would implicitly obey all directions, but at first it was obvious that their prejudices were against the *régime* and some difficulty was encountered in keeping them continually out-of-doors and at rest. Fortunately, however, the first contingent of patients soon manifested remarkable improvement and satisfied themselves that their strength, appetite, and spirits were increased by the open-air life. New-comers have been taken in hand by the older patients and now the difficulty is to get them indoors at all. In the case, anyhow, of the uneducated classes I do not think the system can ever be satisfactorily inculcated in their own homes and I think a great use of the sanatorium is to thoroughly drill them in the proper habits of life. My patients have carried away with them to their homes a most intelligent comprehension of the virtue of fresh air and not only have they rigorously adhered to the prescribed mode of life, but they have also commenced to shake the rooted objections of other sufferers to pure air.

This mode of treatment is so simple that a few lines suffice to describe its broad features, but, as will be gathered from the preceding account, it demands for its successful practice a thorough acquaintance on the medical man's part with the disease he treats, an ingenuity in combating its various manifestations, some knowledge of climatology, and a patient study of each individual case. I must say that I have met with no serious difficulty in submitting phthisical patients to this life in the open air, but during the first week or two each patient has been the object of especial observation. He has not been allowed out of doors in any damp conditions of atmosphere and more notice has been taken of coldness. A week or a fortnight has served in my judgment to produce acclimatisation, but even then certain limitations are enforced. Wind is inimical from its cooling of the body by convection of heat, therefore on all but the stillest days confinement to the shelters is insisted on. Rain certainly increases bronchial catarrh and I have found it best to have all patients indoors while it is falling. About mists I am not certain. Dettweiler finds that they act as sedatives to laryngeal and bronchial irritation, but I have found that in some patients an extra catarrh, indicated by increased moist sounds in the tubes and cavities, followed exposure to them. Each locality must of course be studied separately. Winds from the sea were apt to induce in fresh patients increase of cough and increased difficulty of expectoration, but this effect did not usually extend beyond the first week. As a rule, no other immediate result followed the patient's arrival at Cromer and about the second week increase of appetite and strength began to be perceived with diminution of night sweats. A few patients really felt better from the moment they set foot in Cromer and the sense of immediate stimulation has been described by invalids who have come from other health resorts.

A selection of cases will be described in the ensuing portion of this paper.

(To be continued.)

SOME REMARKS ON RECTAL SURGERY.

BY THOMAS BRYANT, M.CH. R.U.I.,
F.R.C.S. ENG. & IREL.,
CONSULTING SURGEON TO GUY'S HOSPITAL; SURGEON EXTRAORDINARY TO HER MAJESTY THE QUEEN.

(Continued from p. 428.)

HÆMORRHOIDS, EXTERNAL AND INTERNAL.

IN the estimation of the public almost every anal trouble is regarded as hæmorrhoids and when the practitioner consulted is satisfied to accept his patient's diagnosis without making a local examination to satisfy himself as to its accuracy, errors of both diagnosis and treatment must of necessity constantly ensue. It should consequently be a rule of practice whenever a patient complains of supposed hæmorrhoids for the family medical adviser to ask for a local examination and, what is more, such should be conceded and carefully carried out before he ventures to prescribe or assumes any responsibility, and certainly before he prescribes the favourite confection of senna and gall ointment. In hospital experience a large number of so-called hæmorrhoids are examples of condylomata the result of syphilis (*vide* Figs. 8, 8A, and 8B, or of anal warts, Fig. 7[1]), but they may be of chancre or of cancerous disease (Fig. 9[1]). In private practice they may be of the same nature, but they may be anything.

A local inspection will reveal much to a surgeon with an educated eye. If the anus and parts about appear to be normal many possibilities are at once negatived. If loose folds of skin about the anus are visible the question of the former existence of external hæmorrhoids is naturally raised; if a soft venous swelling is seen a recent external hæmorrhoid may be diagnosed (Fig. 10); if it be hard the vein will have

FIG. 10.

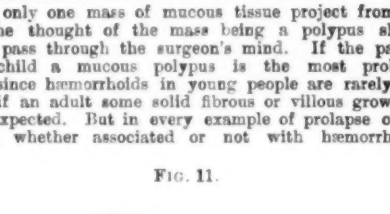
Hæmorrhoids vera of three weeks' standing. The patient was a woman aged fifty-four years.

become thrombosed; and if it be red and tender inflamed. If the external anal folds of skin are œdematous or indurated the surgeon has to decide whether these conditions are due to a syphilitic affection or to some internal rectal disease, and this question can only be decided by an internal rectal examination. If but one indurated or raised skin papilla is present (*vide* Fig. 4[1]), and this is situated at either the dorsal or perineal extremity of the anus, the question of anal ulcer should be at once raised, as has been already pointed out. Should, however, the surgeon in making a local inspection find some prolapse of the mucous membrane of the rectum showing either like the tip of a tongue of mucous membrane (Fig. 11), or as several tips, or as a more or less marked prolapse of one or more masses of mucous tissue with everted and possibly œdematous anal skin folds (Figs. 11A, 11B), the surgeon has to decide whether the local trouble is one of prolapse of only the mucous membrane of the rectum or prolapse of some true internal hæmorrhoid, or of both tissues together; when bleeding to any extent complicates the case the diagnosis is speedily made—for prolapsed mucous membrane rarely bleeds so freely or easily as prolapsed hæmorrhoids—and the venous variety of hæmorrhoid (Fig. 10) is also readily diagnosed from the highly vascular arterial hæmorrhoid.

[1] Vide THE LANCET, Feb. 12th, 1898, p. 428.

Should only one mass of mucous tissue project from the anus the thought of the mass being a polypus should always pass through the surgeon's mind. If the patient be a child a mucous polypus is the most probable cause, since hæmorrhoids in young people are rarely met with; if an adult some solid fibrous or villous growth is to be expected. But in every example of prolapse of the rectum, whether associated or not with hæmorrhoidal

FIG. 11.



Slight prolapse of the rectum of four years' standing. The patient was a man aged twenty-eight years.

FIG. 11 A.

Moderate prolapse of the rectum in a man.

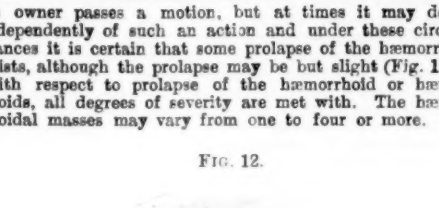
FIG. 11 B.

Prolapsed internal hæmorrhoids. The patient was a man aged thirty-six years.

disease, the question of the disease being due to or complicated with the existence of a polypus, single or multiple, should always be in the mind of the investigating practitioner.

In a popular and clinical point of view hæmorrhoids may be divided into the "bleeding" and "non-bleeding." The bleeding variety is as a rule of the internal kind, although if a true external hæmorrhoid ruptures the varicose vein which forms it may bleed profusely and dangerously (Fig. 12). The internal hæmorrhoid may bleed only when its owner passes a motion, but at times it may do so independently of such an action and under these circumstances it is certain that some prolapse of the hæmorrhoid exists, although the prolapse may be but slight (*Fig.* 11 A). With respect to prolapse of the hæmorrhoid or hæmorrhoids, all degrees of severity are met with. The hæmorrhoidal masses may vary from one to four or more. The

FIG. 12.



Ruptured external hæmorrhoid. The patient was a man aged fifty-one years.

protrusion may only take place during the act of defecation or it may recur when coughing, bending forwards, lifting weights, or straining takes place. It may disappear on the patient assuming the horizontal position to reappear on any standing or sitting posture, or it may be more or less of a constant character and prone to increase on any exertion.

The amount of possible prolapse in any given case can, however, never be accurately determined before a full enema of warm water or soap and water has been administered to

FIG. 13.

After reduction of bowel, or before use of enema.

FIG. 13 A.

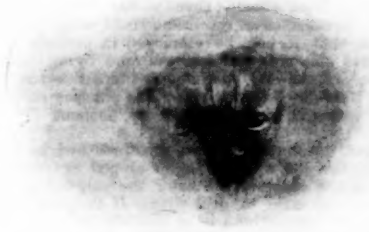
Bowel down after use of large enema. Procidentia recti in a man aged thirty years. He had had it from a child.

bring the prolapsed hæmorrhoids well into view, and this measure should invariably be taken in every case of prolapse or hæmorrhoids or suspected hæmorrhoids before a definite diagnosis is made or any operation for their cure is

decided upon. The enema in bad cases should be as much as a patient can well bear. If the surgeon depends upon the straining efforts of his patients or upon a small enema he will occasionally only operate upon half the disease. I have seen many cases of failed operations for prolapse and internal hæmorrhoids which I am convinced have been due to a want of proper attention to the practice I am emphasising.

Mr. Gowland's many drawings illustrating the local appearances of bad cases of hæmorrhoids before an enema and after its administration—two of which are reproduced in Figs. 13 and 13A—demonstrates very forcibly his opinion upon the matter with the necessity of every surgeon keeping it in his mind. The amount of pain that is present with hæmorrhoids, and even with prolapsed hæmorrhoids, is very variable. A small external hæmorrhoid is often far more painful than a large internal one and particularly when the hæmorrhoid has inflamed, the extreme sensibility of the anal integument being the probable explanation of the fact. Internal hæmorrhoids, if they do not protrude far enough to be caught by the sphincter or to become inflamed or strangulated by the sphincter, may be tolerated by their possessors for very extended periods and nothing beyond inconvenience is commonly complained of. When these become the seat of pain I am convinced that such has been brought about by some small fissure or ulcer having been started by either a large motion cracking the diseased anal tissues or some local source of irritation causing ulceration, for it is true that the surgeon will usually detect the presence of a fissure or ulcer in most of the cases of painful hæmorrhoids for which he is consulted when the history of the case will have told him that the existence of the hæmorrhoids had been recognised for months or even for years (Fig. 14). Such a view of these cases has its practical bearing, for it is more than probable that it is from the want of local cleanliness by washing that these chronic and comparatively painless hæmorrhoids have become acute and painful on account of the ulceration which is excited from the

FIG. 14.



Hæmorrhoids vera and anal fissure. The patient was a man aged sixty-two years.

want of due personal attention to this matter. A person with hæmorrhoids should always well wash the parts after defecation. Besides being the source of hæmorrhage and of prolapse, hæmorrhoids may inflame and as a result of inflammation they may ulcerate. An external hæmorrhoid often inflames and when it does, if it is not actively dealt with, it may become the seat of abscess and if neglected of fistula. An internal hæmorrhoid may likewise inflame and when it does the inflammation is mostly due primarily to its prolapse and secondarily to some spasmodic action of the external sphincter, this action bringing about the more or less complete strangulation of the hæmorrhoid, and the inflammation, ulceration, or sloughing of its substance (Figs. 15, 15A). When an internal hæmorrhoid is thus strangulated it swells rapidly and soon with the tissues about becomes œdematous and the seat of severe pain; and if this condition is not relieved the hæmorrhoid will slough, a natural cure by a painful process being the result.

TREATMENT OF HÆMORRHOIDS.

It is to be regretted that the public as a body are too apt to neglect this trouble and to allow it, whether real or suspected, to drift or run its course and only to seek surgical advice when pain has become a serious symptom or bleeding has become more than an occasional accompaniment. This custom is much to be condemned, for hæmorrhoids as a rule are well amenable to medical and surgical treatment in their early stage and the cases which now pass into the surgeon's hands for treatment would be far less numerous and severe than they often are, whilst in a large number even of serious cases an operation would not be called for. The public are aware that constipation is a prolific cause of hæmorrhoids and as a consequence they feel quite competent to treat themselves and so resort to strong medicines or to the quack nostrums which are so freely advertised and forced upon their notice, or they will consult a druggist, who, because he sells drugs and makes them up, is by some occult process supposed by

FIG. 15.

Sloughing external hæmorrhoid. The patient was a man aged sixty five years.

FIG. 15A.

Sloughing hæmorrhoid after strangulation from prolapse in a man.

so doing to have learned the difficult duties of a physician and be competent to advise; or they take the prescription of a friend who had been treated for this affection, or the domestic pill of a wife or relation for whom the pill had been prescribed by some eminent man with good effect, but for some trouble which may probably have differed very widely from his or her own. By these means much harm is done, for although hæmorrhoids are caused and aggravated by constipation the use of powerful purgative medicines, such as most quack pills contain, are in a general way injurious and are not to be recommended when the sufferer's family medical attendant would certainly with greater safety and propriety supply an efficient remedy as soon as he has satisfied himself of the nature of the case he has to treat, for it must be repeated that an affection which is often considered by the public to be hæmorrhoids is frequently something far different.

Purgative medicine for hæmorrhoids or for any healthy person ought never to be powerful; where such means are required it is in cases in which the bowel has been brought into bad habits and must be led out of them by dieting and the careful use of medically prescribed medicines, for I believe that the free use of quack pills and amateur advice has tended much to the increase of hæmorrhoids. This advice is given with the view of preventing hæmorrhoids and when they are present of relieving them. Much also may be done by dieting. The too free use of brown meats, such as beef and mutton, is to be condemned,

particularly by men or women who cannot take much exercise; and even then it is wise to be more free with fish and birds than with beef and mutton. Any adult who takes two liberal meals of brown meat a day is doing his best to generate hæmorrhoids. Well-cooked vegetables are always good. Much potato is not be be recommended and anything like freedom with alcoholic liquors is to be condemned. I have known people who have had hæmorrhoids, and some very bad ones, ward off for years, and sometimes for ever, the necessity of a surgical measure for their relief by never taking brown meats and living on fish or birds in moderation with well-cooked vegetables and fruit, at the same time avoiding alcoholic liquors. If then under these somewhat grave conditions an affection which has grown to be a serious one can be kept in check, surely by the same means adopted at an earlier stage of its formation equal good may be expected. Experience proves that this may be the case.

With respect to the special treatment of external hæmorrhoids it may be said that the loose folds of skin which go by this name need not, as a rule, be interfered with unless they become the seat of trouble—that is, of fissure between the folds or of ulceration. Should such complications occur the anus should be well stretched and the folds of skin cut off, the lines of incision radiating from the anus and the cut edges of the skin stitched together. Should a varicose vein, as seen in Fig. 10, be the source of trouble or one ruptured, thrombosed, or inflamed be present it must be treated. If the vein be merely varicose a good clearing out of the bowel by a full dose of castor-oil—say an ounce—will probably be sufficient with a day or so's rest to bring about a cure. If the vein be thrombosed, as seen in Fig. 16, it must be laid open

FIG. 16.

An external hæmorrhoid being laid open.

and the clot turned out. Should this measure have been omitted and the thrombosed hæmorrhoid has inflamed and suppurated it must likewise be laid open, otherwise it may become a fistula, the local application of lead and opium lotion helping to complete the cure.

THE TREATMENT OF INTERNAL HÆMORRHOIDS.

When these have become a serious local trouble much may yet be done in the way of their relief as well as in that of cure by following out the suggestions which have just been made under the heading of Preventive Treatment and when these fail much can also be done by surgical methods. For an internal pile that does not protrude so as to come under the influence of the external sphincter or prolapse beyond it and only bleeds at long intervals of time and then but little the preventive treatment I have described ought to be sufficient to retard its growth if not to bring about its cure, and if the patient makes up his mind to follow the treatment out persistently such a hope may be promised and realised. Should the hæmorrhoids, however, protrude so as to come under the influence of the external sphincter this desirable result is not to be expected and under such circumstances some operation for its cure should be entertained and particularly if the case be complicated with hæmorrhage. In some early instances the simple dilatation of the sphincter ani—when the patient has been brought under the full influence of an anæsthetic—will be found sufficient to bring about a cure; and as this simple proceeding is one which is always the first a surgeon undertakes when about to perform any operative curative measure upon an internal hæmorrhoid, it is well when the hæmorrhoidal disease is found to be of recent origin or very limited to give it a fair trial. The same line of treatment is likewise applicable to cases in which a small hæmorrhoid is complicated with a fissure or painful ulcer of the anus. When the hæmorrhoid is large or there is more than one, and these are of long standing, this simple dilating procedure cannot alone be expected to bring about a cure, and under such circumstances some additional measures should be undertaken. If the hæmorrhoid be single the application of a silk ligature to its base after its separation from the skin and submucous tissue by scissors is a favourite operation, the base of the hæmorrhoid being transfixed by a needle armed with a double silk ligature, the surgeon being careful before the ligature is finally tightened to cut off the distal portion of the strangulated hæmorrhoid to relieve tension. In my own practice I have, however, preferred the removal of all internal hæmorrhoids, whether small or great, by means of the clamp and cautery, the benzene cautery having rendered such a measure more facile. This practice has in my hands been very simple and successful and I am unable to give any other results than good. I am not prepared to say that these results are better than those secured by the methods which other surgeons advocate and practise, but I must say that they are certainly as good.

Where a single hæmorrhoid exists or several small ones are present the mere ignipuncture by the thermo-cautery in one, two, or more places after anal dilatation has been accomplished often acts very beneficially. The operation by crushing I have entirely given up, it was a mere passing fashion. The treatment of internal hæmorrhoids by the subcutaneous injection of diluted carbolic acid is only in exceptional cases a satisfactory measure on account of its uncertainty and its comparative tediousness. It is only applicable to internal hæmorrhoids and as a rule one hæmorrhoid should be treated at a time. It consists of the injection into the centre of a hæmorrhoid of five or six drops of a solution composed of equal parts of carbolic acid and glycerine by means of a hypodermic syringe. The acid should turn the hæmorrhoid white and in favourable cases the hæmorrhoid should then wither without pain or sloughing. In other cases the hæmorrhoid sloughs. Its advantages are that it can be employed in patients who require operative measures and fear the cure by operation yet hating the disease and who are indifferent to the expenditure of time in being cured. The practice cannot, however, be strongly recommended on account of its uncertainty.

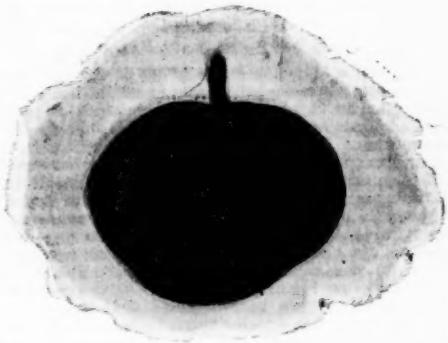
Where internal hæmorrhoids have prolapsed and become extruded from the anus so as to be nipped or possibly strangulated by the external sphincter the surgeon has a painful and difficult case to deal with. If the strangulation is recent, the hæmorrhoid is of medium size, and the parts are swollen from œdema and inflamed, any attempt to reduce the prolapsed hæmorrhoid will without doubt fail, even though the surgeon may succeed in putting it for a time out of sight, for the hæmorrhoid is certain to come down again within a brief period. Such cases had better be left alone and a lotion of lead and opium applied to the part unless the surgeon is prepared to attempt a curative measure and with the patient under an anæsthetic to stretch the anus and reduce the hæmorrhoid with the hope that the inflammatory condition caused by the constriction of the hæmorrhoid by the sphincter will speedily subside and the hæmorrhoid itself subsequently wither and disappear. I have employed this treatment on many such occasions as these and been well pleased with the result. I am sure it is better than any expectant method. If when this measure has been employed the rectum is found to be loaded it should be emptied by means of a full enema, and when the operation is completed a morphia suppository should be introduced and belladonna ointment applied to the anus. If the strangulated parts have already become gangrenous or have sloughed (Fig. 15 A) the treatment I have alluded to is inapplicable. In such cases the parts must be kept clean and treated locally as required.

PROLAPSUS RECTI.

Prolapse of the rectum to variable degrees of severity is so frequently associated with hæmorrhoids that one affection is often mistaken for the other and where the

prolapse is not severe it is as amenable as hæmorrhoids to local treatment. When the case is so mixed the presence of the hæmorrhoids is the probable cause of the prolapse, and from this connexion of the two affections it is always to be remembered that however troublesome prolapse of the rectum may be it is rarely an affection by itself but is the result of some definite cause which has to be made out (Fig. 17). Hæmorrhoids and polypus are the more

FIG. 17.



Procidentia recti of five years' standing associated with bleeding at times. It could be returned by pressure. The patient was a woman aged twenty-seven years.

common causes of this affection, but rectal growths of all kinds—polypoid or sessile—bowel irritation of all degrees, ulceration and other conditions of the bowel, bladder, penis, or similar parts which induces straining, may bring it about. It is likewise often met with where from some cause or other the sphincter ani has lost its power, as in cases of rectal fistula requiring serious or extensive operations or from the atony of the aged. In the treatment of prolapse the removal of its cause is the one principle of practice to be followed, although when the local affection is so severe as to require treatment it should be dealt with much in the same way as has been described for the treatment of prolapse associated with hæmorrhoids. In cases in which there does not seem to be any necessity for the removal of the prolapsed and redundant mucous membrane and yet the prolapse is extreme the linear cauterisation of the prolapsed bowel with the thermo-cautery is a very valuable method of treatment, care being observed not to destroy more than the mucous membrane of the prolapsed bowel before it is returned to its normal position; when removal of the redundant and prolapsed mucous membrane is called for it should be carried out by taking away vertical folds of the tissue, each fold alternating with healthy tissue. In acute prolapse or procidentia there is at times some difficulty in maintaining the reduction of the bowel after it has been affected; in such cases I have found the use of an anal plug for a few hours of much use and the one made of vulcanite such as I have employed for years after a lumbar colotomy answers admirably; it is about from two and a half to three inches long and about three-quarters of an inch wide. It should be kept in position by means of a T bandage and the buttocks should be drawn close together by bandage.

(To be concluded.)

CARDIFF INFIRMARY.—The annual report of the Cardiff Infirmary shows that during 1897 there were 1688 admissions of in-patients and that the average daily number resident was 117. There were also 13,280 out-patients. The receipts amounted to £6642 and the total expenditure to £7405.

SOUTHERN DISPENSARY, BATH.—The annual meeting of this institution was held on Feb. 15th, under the presidency of the mayor. The medical report showed that 665 patients had been treated during 1897 and that the majority of these had been treated at their own homes. The financial statement showed that at the end of the year there was a favourable balance of £54.

A ROUGH NOTE ON THE TREATMENT OF SYPHILIS.

BY W. MURRAY, M.D. DURH., F.R.C.P. LOND.

THIS note is by way of protest against routine methods of treating secondary and tertiary syphilis—that is, against the administration of a course of mercury or the iodides with the idea that a steady course of either or both will in time effect a cure, if a cure is to be obtained by medicine. I hope to show that while too much mercury or too long a course of the iodides often does harm there is a method of so administering these drugs, which play into each other's hands, that we can get far better results than by the routine method above referred to. In short, a good deal of observation, and experience the result of such observation, are needed to pilot a patient through a course of treatment to a successful issue. We must often beat a hasty retreat and often put on a bold front in attacking and dodging the enemy and we must be careful not to let our weapons do harm instead of good to our patient. Need I say that the constitution and stamina of the patient and his or her surroundings must enter into our calculations or we may kill the patient while trying to cure the disease.

My first protest is against a prolonged or severe course of mercury, for as soon as this drug has killed the brood of microbes, so to speak, or killed the specific poison, it begins to do harm and for the time being it should be withdrawn. For instance, let us suppose a case of severe secondary syphilis which has not been treated at all—skin eruptions, sore-throat, falling off of hair, enlarged concatenate glands, &c., all present. We begin by a course of mercury and the happiest results follow; then, by way of securing our advantage, we carry on this treatment for several weeks, by which time the patient has lost strength and an onset of more severe symptoms tells us that the disease is not cured and that a more serious phase of the disease (in spite of the mercury or in consequence of it) has been developed. What are we to do? If we give more mercury the disease grows worse, excavating ulcers or impetiginous sores arise, and we are in despair if nodes and periosteal pains supervene. Then is the moment for iodides, and we get the happiest (though perhaps only temporary) results from them. Our patient apparently recovers—the sores heal, the periosteal developments cease, and all seems well—but a time will come (I am supposing a somewhat inveterate case in a poor subject, and these are the cases requiring all our care and skill) when fresh symptoms will show themselves, such as suspicious sores in the mouth or scaly patches in the palm, and we are convinced that the disease is not cured. If left to itself, and these recurring symptoms have not sent off our patient to seek *further advice*, we shall probably see a recrudescence of the disease in a milder form if the disease has been judiciously treated, and we once more administer mercury or combine it with iodide; then a rapid disappearance of the symptoms once more takes place and we once more get an apparent cure but this is only a fall of the tide and it will surely rise again in spite of both mercury and iodides. While giving these medicines under such circumstances I have only too often seen still more severe symptoms supervene and grow worse as long as one or both (mercury or iodides) were administered. Under such circumstances what is to be done? Are we to give up all treatment and to leave the patient to "nature"? It would be wiser to do this than to give more mercury or iodide, especially more mercury.

Happily there is another drug which seems to deal with this mercurio-syphilitic diathesis and to help the patient over the stile, and that is *quinine*. At this juncture a bold administration of quinine will often act like a charm, and it may be safely combined with the iodide of potassium if that be deemed wise or necessary. This combination seems to be a deadly foe to the mercurio-syphilitic diathesis. Five or six grains of quinine three times a day is enough and it will work well with fifteen-grain doses of iodide. Indeed, it is quite wonderful to see how much better the iodide works with quinine than mercury and how this combination tends to undo the bad effects of mercury where specific disease has occurred in a poor habit of body with unfavourable surroundings.

This leads me to speak of another resource which in such

a patient may succeed when all medicinal treatment has failed—that is, when the patient has been shattered by iodides and mercury and is still unfortunately not cured. What a pitiable plight for both patient and medical man—the one in despair, the other at his wit's end. What are we to do in such straits? I will relate a case by way of illustration; it occurred in a friend of mine when he was a student in London. He suffered from severe constitutional syphilis and sought the highest advice in several quarters. One and all advised mercury, and the worse he became the more mercury they gave him, until his teeth were loose, his gums bleeding on the slightest touch, and his symptoms growing worse. His surroundings in a London lodging were not favourable and he was sinking in despair. Luckily an old uncle, a man of the world of shrewd sense, called on him and took the case into *his* hands. He took the poor lad down to the country, gave him two quarts of strong beef-tea and a bottle of port every day, and prohibited all and every form of medicine. When at the end of two months he presented himself at the hospital again his friends hardly recognised him; all his specific symptoms were gone, his health was fully restored, and he has never had a symptom of syphilis since. Here was a case where the specific cure was pushed too far and a want of due regard to the patient's general condition and surroundings was hurrying him to an early grave; and yet we must suppose that the potentiality of the syphilitic poison had been destroyed by the mercury, while the remedy was keeping up the symptoms by some means—symptoms having the veriisimilitude of the disease. In such a case probably quinine would have been of great use, but the other plan of "pure air, highly nutritious diet, and good wine" did the work alone and probably more effectually. I have never forgotten this case and have often seen similar but never such striking results.

The gist of my observations, then, is this: (1) that we must exercise the greatest judgment in giving mercury and the iodides; (2) that we must not trust to them alone; (3) that quinine is a most excellent supplement to the specifics; (4) that healthy surroundings with appropriate diet (wine) and regimen play a most important part in dealing with advanced stages of the disease; and (5) that we must often and again cut off the specifics and try hygienic treatment to see if we have gone far enough to effect a cure and if we have not succeeded we must again attack the disease by specifics.

Outbreaks of syphilis seem to come in waves or cycles. Each time the disease recedes under specific treatment it may redevelop itself and reappear in a milder or more severe form, requiring a fresh course of mercury or of iodide, and we must keep a most careful eye on the symptoms when giving mercury, cutting it off when the symptoms stand still or get worse and supplementing with iodide and quinine when these unfavourable indications occur.

Do not push the mercury too far, especially if there is no decided improvement when its action is fully established. Try the iodide alone or in combination with very small doses of mercury, or give the iodide with quinine in five-grain doses. "Ring the changes" is an excellent motto for the treatment of these cases, and if we follow it with judgment and perseverance we shall at last eliminate the disease; but if we rely on mercury alone, or on iodide alone, or give either or both too long, we shall defeat the end in view and possibly make the patient worse instead of better. It is by a system of giving and withdrawing the specific medicines as the symptoms indicate rather than by a steady and persistent use of them that we eventually get the better of the disease—we, as it were, let it exhaust itself while we are protecting the patient from its successive onslaughts.

Newcastle-on-Tyne.

WESTON-SUPER-MARE HOSPITAL AND DISPENSARY.—The annual meeting of this institution was held on Feb. 17th. The financial statement showed that during 1897 the receipts had been £1919, whilst the expenditure had necessitated the withdrawal of £260 from the Investment Fund. The medical report showed that 345 in-patients had been admitted during the past year, giving a daily average of 20 beds occupied. There were also 552 out-patients and 763 casualties. The report of the provident dispensary showed that at the close of 1897 there were 2330 patients on the books and that during the year 8179 home visits had been paid by the medical officer.

GRANULAR KIDNEY AND WHY IT IS SO OFTEN OVERLOOKED.[1]

BY SAMUEL WEST, M.D. OXON., F.R.C.P. LOND.,
ASSISTANT PHYSICIAN TO ST. BARTHOLOMEW'S HOSPITAL; SENIOR PHYSICIAN TO THE ROYAL FREE HOSPITAL.

GRANULAR kidney is very often overlooked, not because the diagnosis is difficult, but because there is little in the symptoms to draw attention to the kidneys. The symptoms of granular kidney become pronounced, as a rule, in the middle period of life, but the disease has existed long before. Cases of granular kidney in young people or even in children have been recently recorded in fair number. The relation between granular kidney and acute nephritis is often misinterpreted; granular kidney does not often take its rise in acute nephritis. It is possible that acute nephritis may, if it last long, lead to a form of interstitial nephritis, but whether the disease recognised as granular kidney can result from acute nephritis is another question. Simple acute nephritis in the adult is by no means common; when acute nephritis occurs it is generally because the kidneys are already unsound and granular kidney is a very frequent antecedent. As in a child acute nephritis raises the presumption of antecedent scarlet fever, so in the adult it raises the presumption that the kidneys have been diseased beforehand. Two instances were given in which apparently an acute nephritis ended in interstitial change and in one of these albuminuric retinitis developed. One of the common results of granular kidney is hæmorrhage and this may take place in almost any part of the body; thus it is common in the brain and is a common cause of apoplexy, especially in early life. Epistaxis is frequent and a case is quoted in which epistaxis was almost the first symptom of serious disease though the patient died from uræmia within six weeks from the commencement of symptoms.

Hæmorrhage may also take place from the gums, pharynx, stomach, and bowels and a probable instance of hæmatemesis has been recorded. Hæmoptysis also probably occurs, but is rare. Hæmorrhage from the bladder is better known; it may sometimes be profuse and produce very puzzling symptoms. Cases of this kind were quoted in which the diagnosis had to be made from calculus in the bladder, but post mortem nothing was found but granular kidney. Recurrent hæmaturia is a frequent occurrence in small amount and is a point of diagnostic importance. Hæmorrhages into the retina are part of albuminuric retinitis and detachment of the retina is not altogether uncommon, but generally the effusion is not blood but serum. Hæmorrhage has also been observed beneath the conjunctiva and behind the orbit, the latter producing puzzling symptoms during life. Hæmorrhages into the skin are not known. Heart failure is a more common symptom and the cases may present themselves as instances of angina. Pericarditis is by no means a rare complication and may produce no symptoms, so that the discovery is more or less accidental and made by physical signs. A case is recorded in which pericarditis was the first grave symptom to be recognised and the patient died within six weeks from the time when he was thought to have been in perfect health, the first complaint being some defect of eyesight.

General failure of vision is a marked symptom in the later stage of the disease and may amount to what might be almost called cachexia. Such cachexia developing in early middle life without other obvious cause should always raise the suspicion of granular kidney; it may considerably modify the course of other diseases, as in two cases of morbus cordis quoted, in which, though the patients had morbus cordis, the symptoms were due to granular kidney and from that they died. As intestinal symptoms are common the cases may be diagnosed as dyspepsia or as some other form of intestinal affection. In the latter connexion a very interesting case was recorded in which uncontrollable diarrhœa occurred, from which the patient died, but at the post mortem nothing was found but granular kidney.

General acute or sub-acute skin eruptions bear a very important relation to granular kidney, for they are almost without exception fatal; two or three striking instances of this

[1] Abstract of a paper read before the Harveian Society on Feb. 17th 1898.

have been given. Nerve symptoms which develop may be very misleading; thus headache may resemble hemicrania and may also suggest cerebral tumour, especially when associated with optic neuritis; cases of this kind were mentioned. Cramp, especially when associated with general loss of power, may suggest various forms of nerve disease and an instance is recorded in which the symptoms very closely resembled those of locomotor ataxia; another case presented itself as an instance of peripheral neuritis. The association of gout and lead poisoning in granular kidney is well known and often produces difficulties in diagnosis.

The toxic conditions are generally arranged under the heading of uræmia, but this occurs in two forms; the chronic uræmia, or, as it may be called, "chronic renal toxæmia," no doubt explains many of the symptoms which have been already described. Acute uræmia in granular kidney is, of course, generally fatal. It is often very difficult to diagnose from apoplexy, epilepsy, diabetic coma, and some other conditions. An instance is given in which the patient was admitted into the hospital as a case of apoplexy but proved to be one of uræmia, and although the patient was a well-marked instance of granular kidney he completely recovered and has been now well and at work again for some months without any other symptoms.

It is thus obvious that it is only too easy to be misled by the prominent symptoms and to miss the prime cause of the disease—viz., granular kidney. The early diagnosis of granular kidney is important, for although it is true that in the later stages little can be done, still in the early stages it is probable that if the disease were sooner recognised a good deal might prove possible either to prevent its development or, at any rate, to check its progress.

Wimpole-street, W.

"RADIOSTEREOSCOPY."

BY W. S. HEDLEY, M.D. EDIN.

THE progress of radiography seems to open up a field of usefulness for the long neglected stereoscope. If it be realised that upon the radiographic film or the fluorescent screen there are thrown upon one flat surface, as in a transparency, the shadows of a variety of objects, which latter in reality occupy in space very different planes, and if further it be borne in mind that such light and shade as the radiograph presents are nothing more than indications of relative opacity to the x rays, it is evident that such a picture can only very imperfectly display the true relationship of objects and must entirely fail to give any adequate idea of the contours of their surfaces. In the case of foreign bodies an exact localisation can of course be secured[1]; that is to say, the radiographer is able to give the exact position of the foreign body with reference to certain artificial surface marks; but such information cannot convey to the mind as sight does a clear conception of the various objects that go to make up the picture. Yet this is what is chiefly wanted. Any method therefore must be acceptable which will enable the surgeon to see with his own eyes at one glance, and at any time during an operation, the *tout ensemble* of the region he is dealing with. It appears to me that the stereoscope is able to accomplish this.

To obtain a stereoscopic effect it need scarcely be said that the first requirement is true binocular vision on the part of the observer. The second indispensable condition is that there be two corresponding pictures of an object, the one seen from the point of view of the right eye and the other from the point of view of the left eye. It is evident that in the case of the radiograph these can be secured either by moving the object itself or by laterally displacing in a direction parallel to the plane of the sensitive plate the source from which proceed the x rays. In dealing with the living body the latter is the simpler process. But the vital point to ascertain is, what ought to be the proper extent of this displacement and what are the physical and physiological considerations upon which the extent of this displacement must be made to depend? In other words, given a certain distance of the positive electrode from the object to be radiographed and the thickness of the object itself, what is the proper lateral displacement of the focus tube? or given a certain displacement of the tube and a certain thickness of the object, what is the proper distance of the anode from the object to be radiographed? I have experimented on a purely empirical basis with the ordinary lenticular stereoscope and have at times obtained effects which were fairly correct. More often the relief is exaggerated or otherwise untrue. But M. Marie and M. Ribaut have lately attacked the question from another standpoint and have published certain formulas[2] the use of which will save a vast amount of experimental trouble. These writers point out that in looking at an object in the ordinary way the angle of convergence of the eyes and the accommodation vary simultaneously in passing from one plane of an object to another plane; but in stereoscopic vision the images are on one plane and therefore accommodation remains constant, while the angle of convergence of the eyes varies as it passes from one plane of the reconstituted object to another. This angle depends upon the thickness of the reconstituted object and its distance and these two of course depend in their turn on the distance from the real object and the thickness of the latter. This distance and this thickness must vary indefinitely, but the maximum limit of displacement of the tube cannot exceed a certain amount. Now, given the distance of the object and its thickness the lateral displacement of the tube may be calculated by the following formula: Where Δ is the relative displacement of the tube and object, D the distance of the tube from the object, and T the thickness of the object $\Delta = D \frac{(D+T)}{50\ T}$. Thus, if the object be, say, 3 cm. thick and its distance from the tube be 20 cm. then the displacement of the tube would be 3 cm. When the displacement of the tube is equal to the distance apart of the eyes, say 6·6 cm., the virtual image appears at the distance that the object has been photographed from and is the proper size. Therefore when practicable the displacement ought to be 6·6 cm. This being a known quantity and the thickness of the object also being known the following formula is given to calculate under such conditions the proper distance of the object from the tube: $6\,6 = D \frac{(D+T)}{50\ T}$.

I have lately worked on these lines and have been able fully to verify the accuracy of the method. Immediately the negatives are taken the images may be fused in the stereoscope[3] without reduction even with plates 8½ in. × 6½ in. in size. In the case of metallic foreign bodies there is sometimes an apparent want of truth in the result, owing perhaps to the fact that those objects which are most distinct in the field of vision have a tendency to appear nearer. Such cases are best dealt with by the lengthier methods of localisation. But when, as occurs in the great majority of cases, it is of importance to realise the relationships of the various structures in all their dimensions, as in bone surgery at the present time, without anticipating the soft tissue radiography of the future, it appears to me that radiostereoscopy is destined to play an important part.

Mansfield-street, W.

[1] THE LANCET, Oct. 16th, 1897, p. 1001.

[2] Archives de Physiologie, 1897.

[3] The adjustable reflecting stereoscope of Cazé.

A CASE OF ANTHRAX TREATED WITH LARGE DOSES OF CARBOLIC ACID.

BY G. SCOTT JACKSON, M.D. GLASG.

THE following case seems to me to be worthy of report. The constitutional symptoms were so severe as to suggest that the disease was not only local but general, and treatment was not commenced until eight days after the inoculation and five days after the appearance of a "sore." I firmly believe that the free hæmorrhage, which was encouraged, and the exhibition of carbolic acid in such large doses contributed towards the recovery of the patient. He received ten minims combined with an equal quantity of tincture of perchloride of iron every hour and his urine was quickly affected. The kidneys were evidently strongly irritated and traces of albumin were found for some considerable time afterwards. The spores of the bacillus anthracis are said to

withstand a 5 per cent. solution of this drug, though the bacilli themselves succumb more readily, but I am of opinion that in this case the former, having escaped into the circulation, were very largely got rid of by the hæmorrhage, whilst the drug was sufficiently powerful to enable the patient to overcome the latter. Though no bacteriological examination was made the history and symptoms were sufficient to warrant the diagnosis.

The patient, who was a shepherd, aged thirty-six years, had cut up the carcase of a beast on Jan. 10th. As several suspicious cases had occurred a veterinary surgeon, at the instance of the county authorities, was in attendance. He warned the man to be careful as he suspected the case to be one of anthrax. Such it proved to be. The hands were washed immediately afterwards in a solution of permanganate of potash, but most attention was given to the left one, upon which were some scratches. On the 13th a small spot appeared on the right forearm, but in spite of the warning received no notice was taken of it. He was all right on the 14th, but on the 15th, forty-eight hours after the appearance of the "sore," he began to feel ill and was shivering. After a bad night he kept his bed on the 16th, his arm being much swollen, and he was troubled with diarrhœa. He vomited several times and had during the night of the 16th some well-marked rigors.

I saw the patient for the first time on the morning of the 17th. The temperature was then 103° F. The whole arm, forearm, and hand were enormously swollen, and there was a nasty, peculiar looking spot on the right forearm, a pustular base surrounded by blebs containing a transparent liquid. There were pain and tenderness in the axilla due to some enlarged glands. As he lived seven miles out in the country I advised his removal to where he could be better attended to. This I was promised should be done, but that night he was considered by his friends to be too ill to stand the journey, so I saw him again the next morning and found him much worse. He had spent a very restless night and at times had been quite delirious. The diarrhœa still continued. The patient was drowsy, the tongue was foul and coated, and the temperature was 103·4°. The "sore" was now as large as a Tangerine orange and its contents were very dark-coloured. There was another very similar spot a little higher up, but the fluid in this was clear. The pulse, which was 130, was hard and full. Having put him under chloroform I made very free crucial incisions through both pustules, the swelling of the parts causing the tissues to separate very widely when cut, and I swabbed out the wounds very freely with pure carbolic acid. There was a great deal of hæmorrhage. The same drug was now taken internally and the patient was able to retain it, though everything else was for the next twenty-four hours vomited. The next day (Jan. 19th) there was undoubted improvement. The temperature was 100 2°. There was no delirium. The patient had slept and his expression was good and intelligent. The diarrhœa had stopped, but there was constant vomiting. There was great change in the pulse from being strong and full to being small and compressible. This was accounted for by the bleeding, as blood was still oozing through the dressings. There was another bleb of the size of a pigeon's egg above the elbow and the patient complained of pain in the region of the spleen. For the next few days he remained very much in the same condition, but a dark hæmorrhagic spot appeared on the back of the hand and spread until the whole of the radial aspect of the forearm back and front was marked. The appearance was more hæmorrhagic than that of a slough, though the superficial layer of the epidermis separated leaving a most dark-coloured surface below. The bleb above the elbow never coloured. The temperature was normal in a week, the swelling gradually subsided, the vomiting passed off, and the patient has now recovered with the exception of the wounds made by the knife, which are, however, healthy granulating surfaces.

Alnwick, Northumberland.

MERTHYR TYDVIL GENERAL HOSPITAL.—The annual meeting of this hospital was held on Feb. 17th. The report showed that the total receipts for the year amounted to £1300 and the expenditure to £1066. The chairman (Mr. J. Plews) stated that £6330 had been received towards the Hospital Diamond Jubilee Fund and that the Marquis of Bute had promised £2300 if the subscriptions were made up to £10,000. The medical report showed that 210 in-patients had been treated during 1897.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

OSSIFYING CHONDROMA OF THE FIFTH AND SIXTH CERVICAL VERTEBRÆ.

BY E. P. WRINCH, M.B., B.S. DUNELM., M.R.C.S. ENG., L.R.C.P. LOND.

CARTILAGINOUS tumours are known to be of very slow growth and when deeply seated may easily escape observation for some long time; that they may by reason of this slow growth give rise to no symptoms, even when pressing on important structures, is well shown by the following case.

On Nov. 4th, 1897, I was hurriedly called during the evening to see a Norwegian sailor, aged nineteen years, on board one of the vessels lying at the docks. I found him lying in his bunk in a perfectly helpless state, but quite conscious and rational. From him and three of his fellow sailors I managed to get the following history of the case: that he was in ordinary health the previous evening and went with a fellow sailor into the town, where they both were the worse for drink; that on their return to deck there was a scuffle, during which the patient fell and had to be carried to his bunk; there he lay until next day, when on his getting worse the captain of the vessel sent for me. I saw him twenty-one hours after the accident. He complained of no pain but of numbness in both legs. On examination I noticed a small wound of the skin over the left orbit, which was only superficial. He was very collapsed and looked very pale; his pulse was 46 and the respirations were 18; there was absolute loss of power and sensation in both arms and both legs and all reflexes in them were absent; there was marked priapism and the bladder was very full and the bowels had been confined since the accident. I had him removed to the Boston Hospital, where he was seen again an hour later. He was then still more collapsed; the pulse was 43 and the temperature was 95·6° F.; the breathing was regular but purely diaphragmatic. Nearly a pint of urine was drawn off with a catheter. He was given restoratives and appeared to rally somewhat, but he died six and a half hours after admission somewhat suddenly.

A necropsy was made by Mr. R. E. South and myself six hours after death and the following condition of affairs was found. The body was that of a well-developed man; there were no marks of violence except the small wound over the left orbit mentioned above. On cutting down from behind through the muscular layers on to the cervical portion of the spine a marked bony enlargement was felt on the left side in connexion with the fifth and sixth cervical vertebræ, which quite cemented the laminæ and spinous processes of the two bones together. The bones from the axis to the sixth cervical vertebra were then carefully removed with the contained cord and on clearing away the muscular attachments the enlargement felt was found to be an ossification of tissue springing from the left side of the fifth and sixth vertebræ. The surface of the growth was mainly hard and somewhat rough, though in some places there were evidences of cartilage. On careful disarticulation of the several bones and on opening up the spinal canal the growth was seen to continue upwards inside the canal as far as the upper border of the third cervical vertebra; in the canal the growth was purely cartilagious. It occupied quite three-fourths of the canal. Between the growth and the meninges there was evidence of recent hæmorrhage; the cord itself was very much compressed by the growth for nearly two and a half inches and completely displaced to the right side. The laminæ of the third, fourth, and fifth vertebræ were very much thinned on the right side, evidently from pressure. The roots of the spinal nerves did not seem to have suffered. All the other organs were found to be quite healthy. The specimen was sent to Mr. Shattock, curator of the museum of St. Thomas's Hospital, and he

kindly examined the tumour and reported it to be of a simple nature and of purely cartilaginous consistency.

Death was evidently due to the result of the hæmorrhage pressing upon the displaced and already much compressed cord, spreading upwards to the origin of the phrenics. It is very curious that with the amount of compression of the cord there must of necessity have been before the accident that there should have been no symptoms and that the man should have been in the good health that he was stated to have been.

Boston, Lincolnshire.

OBSTRUCTION OF LABOUR IN A MULTIPARA.

BY J. B. PIKE, M.R.C.S.ENG., L.R.C.P.EDIN.

ON Feb. 21st, 1898, I was sent for to see a woman and found her under the care of a somewhat elderly midwife. A large head was impacted in the pelvis and the uterus, in the usual midwifery position, bulged forward well over the anterior brim of the pelvis, lying almost between the thighs. The woman told me that this was her twentieth child, including two editions of twins, and that her age was thirty-eight years. She was much exhausted by inefficient pain and being unable to procure skilled assistance except by some delay I applied the long forceps and drew down the head. The child proved far above the average size and some difficulty was found in extracting the body. A large gush of clots and fluid blood followed and the placenta was extracted by the hand, following the aberrant curve forward of the uterus. I was fortunately able to induce contraction by pressure and was thankful as I felt the uterus once more becoming a pelvic organ. During extraction of the child the uterus was as far as possible held in position by traction upon a binder, but with the assistance at my disposal the "dorsal decubitus" appeared to me to be impracticable, taking into account the helpless condition of the patient.

Loughborough.

NOTE ON A CASE OF ALBUMINURIA IN A PREGNANT WOMAN.

BY EDWARD S. GOODDY, F.R.C.S. ENG.

THE patient was a tall, thin, sallow woman, aged twenty-nine years. She had married young and had had two children by her first husband. Her health during both pregnancies was good and the confinements were normal. She had not aborted or miscarried. After the death of her first husband she remained a widow for some years, during which time she had no serious illness. When I was called to see her on Oct. 5th, 1897, she said that she was five months pregnant, that the child had quickened, and that its movements were strong. Her general symptoms were of no particular interest, consisting of neuralgia, headache, nausea, vomiting, and general malaise. On examining the urine I found it heavily loaded with albumin. When boiled and allowed to stand for twenty-four hours the deposit was about a quarter of the amount tested. Nothing worth recording happened for the first week; she improved slowly in general health under treatment, but with slight variations the amount of albumin continued as large as at first. On Oct. 13th the fœtal movements were said to be violent and to cause her severe pain, but on the 14th she informed me that they had ceased and that she was sure the child was dead. There were no fœtal heart sounds audible. By Oct. 17th there was a decided reduction in the albumin. On the 20th it had sunk to a trace and by the 24th it had disappeared. Her health also had rapidly improved and I saw no more of her until Nov. 5th, when she miscarried with a five months' fœtus which was macerated but not decomposed. A trace of albumin was found on Nov. 8th but on no other occasion.

The interest of the case lies in the light it seems to throw on the causation of albuminuria in, at any rate, the early months of pregnancy. Its persistence during the life and its rapid subsidence and early disappearance after the death of the fœtus before its expulsion from the uterus are strong arguments in favour of the view that the cause lies not in any alteration of abdominal pressure and venous tension, but in an inability of the kidneys to cope with the increased excretion demanded by fœtal life and growth. It is, to my mind, a question whether the trace of albumin found on Nov. 8th was or was not due to a temporary excretory excess coincident with, and due to, uterine involution.

Llandudno.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

LONDON HOSPITAL.

A CASE OF INCOMPLETE REDUCTION OF A STRANGULATED INGUINAL HERNIA; OPERATION BY MEDIAN ABDOMINAL SECTION; RECOVERY. ACUTE INTESTINAL OBSTRUCTION ONE YEAR LATER FROM VOLVULUS AND INTERNAL HERNIA THROUGH AN APERTURE IN THE MESENTERY.

(Under the care of Mr. J. HUTCHINSON, Jun.)

A MAN, aged twenty-two years, suddenly developed a right inguinal hernia, its descent being soon followed by vomiting. The medical man who was called in to see him reduced the hernia by taxis and gave him an enema. The vomiting, however, continued during this (the second) and the next day and on the latter day the patient was admitted to the London Hospital with the following symptoms: (1) severe intermittent abdominal pain, chiefly felt about the umbilicus; (2) vomiting and complete anorexia; (3) dryness and furring of the tongue; and (4) slight abnormal fulness at the upper part of the right inguinal canal. In the belief that the case was one of imperfect reduction or of *reductio en masse* Mr. Hutchinson, jun., operated as soon as possible by median laparotomy. The intestine was distended and it was with some difficulty that the right internal abdominal ring was exposed on this account. A portion of the ileum (not the whole circumference of the loop and therefore a Richter's hernia) was found to be tightly nipped at the internal ring, into which a director was introduced and the edge divided in an upward direction, taking care to avoid the deep epigastric artery. The strangulation had been very marked, some of the peritoneum over the portion nipped being stripped off. It was interesting to see how the gut at once drew itself back as soon as the constriction was relieved—in other words, no traction from above was needed. The wound healed by first intention and there was no sickness after the operation. Five months later the patient went to see Mr. Hutchinson, jun., on account of dyspeptic symptoms; he was otherwise in very good health and there had been neither any tendency to ventral hernia nor return of the original hernial protrusion.

The patient remained in good health (with the exception of the vague abdominal discomfort occasionally complained of) for a year, continued at active work, and married. Exactly twelve months after the first operation he was seized one day with abdominal pain, soon followed by vomiting. He had not previously been constipated nor was he conscious of having committed any error in diet. He was readmitted into the hospital and as the continued sickness and growing abdominal distension (one coil in particular appeared to project beneath the abdominal wall) pointed to a mechanical cause for the obstruction a second laparotomy was performed, this time above the umbilicus. The small intestine was found to be much distended with fluid and gas, and some loops hanging down into the pelvis appeared to be twisted on their axes. In addition to this, part of the ileum was adherent to the anterior abdominal wall on the right side of the scar left by the first operation. The peritoneal surface immediately behind the latter was perfectly smooth, illustrating the advantage of sewing up the peritoneum separately by a continuous

catgut suture after a laparotomy. The adhesion behind the right rectus muscle was an extensive one and there could be no doubt that the intestine which was so fixed was that which had at first been strangulated in the internal ring and, as previously noted, had partly lost its peritoneal covering. No other adhesions were found and in particular no band, as had been suspected to be present. Although the loop which was adherent to the abdominal wall did not feel tense or as though it could be the active agent in causing obstruction, yet no other lesion capable of doing so could be found. But in the manipulation of the distended coils to the left of this adherent one and in the pelvis it seemed to Mr. Hutchinson, jun., that a volvulus was unravelled and he therefore sewed up the abdominal wound. As will be seen later there was a volvulus, but in addition an aperture in the mesentery which was not detected. Unfortunately the relief afforded by this operation was practically nothing. No peritonitis supervened, but after a few hours the vomiting recurred, although the pain was perhaps not quite so severe. The vomit became feculent in odour. After waiting three days, during which no important change occurred, the abdomen was again opened (this time in the right linea semilunaris) and the adhesion, which was very firm and involved quite half the circumference of the loop of ileum, was cut through with scissors or broken down with a blunt instrument. Mr. Hutchinson, jun., was doubtful whether the division of this adhesion would relieve the symptoms, but no other cause for their persistence was made out. It must be remembered that the operation was done on a greatly distended abdomen and the search for the seat of obstruction was difficult. The patient died a few hours afterwards.

Necropsy.—Mr. Neville Howse kindly made a post-mortem examination for Mr. Hutchinson, jun., which revealed a most interesting condition of things. The abdomen contained a small amount of blood-stained fluid. A loop of small intestine (the lower part of the ileum) about twelve inches long had passed through a small slit in the mesentery about two inches above the right sacro-iliac joint and had then become twisted on itself and gangrenous. This volvulus lay over the descending colon, occupying the left iliac and lumbar regions. There were numerous adhesions around and the condition was so complicated that one could not ascertain exactly what had occurred until the intestines were completely removed from the abdomen. It was impossible to make water poured into the upper end of the small intestine pass through the obstructed loop until the adhesions were broken down and the slit in the mesentery was enlarged. Mr. Howse considered that it would have been hardly possible to unravel the intestine and remove the obstruction during life.

Remarks by Mr. HUTCHINSON, jun.—Some years ago Mr. Lawson Tait suggested that in operating on strangulated hernia it might be found advisable to perform a median abdominal section in preference to opening up the inguinal canal, &c. Mr. Tait thought that a radical cure might perhaps be more easily effected in operations from within the abdomen by dealing with the very commencement of the hernial canal. It is probable, however, that few if any surgeons have deliberately adopted this method of performing the operation of herniotomy and the occasions on which it is done more or less by accident must be very rare. Such has been the case however now and then with strangulated obturator hernia, in which the abdomen has been opened through the middle line, the diagnosis made being that of "intestinal obstruction," and it is only after careful exploration that the cause has been found to be a hernia. Again, the same thing has happened with a Richter's hernia or partial nipping of the gut in the femoral ring. The above case affords an interesting opportunity of testing the method as applied to inguinal hernia. With regard to the facility afforded by a median section for performing suture of the internal ring I must say this case impressed me strongly with its difficulty. The surgeon has to work across the whole width of the rectus muscle, the intestines are very liable to get in the way of the instruments, and I did not attempt to suture in the present case (the patient was a very muscular man with a broad abdomen and inflated intestine). I would note that it is almost impossible to push the internal ring towards the middle line from outside. The case had an unfortunate and strange sequel. We have to note the remarkable occurrence in the same patient of two attacks of acute intestinal obstruction from totally different causes; one, the nipping of small intestine at the internal ring, and the other, the passage through a rent in the mesentery followed by volvulus. These two attacks were separated by an interval of a year, during which the patient was practically in perfect health. It has, however, been mentioned that he had complained of abdominal discomfort, though not sufficient to prevent his working. It is probable that this symptom was due to adhesions forming between the intestines and between the latter and the abdominal wall. It is remarkable how much the symptoms vary when such adhesions are present. One patient whom one knows from operation to have the intestines matted together in a wholesale manner will perhaps recover from the operation and enjoy apparently perfect health; on the other hand, we know too well the disastrous results which may follow from a few or even a single adhesion by the production of kinking, volvulus, or stricture of the gut. It is difficult to believe that the first operation of herniotomy in the present case had anything to do with the formation of a hole in the mesentery. Three years ago my colleague, Mr. Dean, and I recorded[1] a case somewhat similar to this one in that the same patient underwent two operations for acute intestinal obstruction due to a band. In that instance, fortunately, the patient made a complete recovery.

GENERAL HOSPITAL, RANGOON.

AN UNUSUAL CASE OF PENETRATING WOUND OF THE ABDOMEN.

(Under the care of Surgeon-Captain DUER.)

THE following very remarkable case demonstrates the small amount of shock which may follow the infliction of serious injury to the intestine. Death resulted obviously from the internal hæmorrhage and not from the wound of the bowel, for the patient lived only twelve hours, and this was much too short a time for any extravasation of the intestinal contents to have led to this result. It is difficult to see how the severity of the case could have been recognised immediately after the infliction of the injury.

A healthy, well-nourished native of Burma, aged about thirty years, was admitted at 8.30 A.M. on March 1st, 1897, to the General Hospital, Rangoon. While squatting in Eastern fashion in a corner of his house with his back to the wall someone outside the house had stabbed him in the buttock through the thin bamboo matting of the wall. He did not apparently attach much importance to his wound. On examination a transverse wound one and a half inches long at the level of the lower end of the sacrum and just to the right of the middle line was found. A probe passed in about one inch and impinged upon bone. The rectum was examined and no injury was detected. The pulse was good; the patient complained of little pain and there were no symptoms of shock. At 7.30 P.M. Surgeon-Captain Duer was called to see the patient and found him moribund. He was almost pulseless; his abdomen was distended and there were signs of much fluid within it. He died very shortly afterwards.

Necropsy.—At the post-mortem examination the track of the wound was found to pass between the sacrum and the coccyx. The floor of the pelvis to the right of the rectum was perforated. A coil of small intestine about midway between the stomach and great intestine hanging in the recto-vesical pouch was penetrated. The abdomen contained a great quantity of blood the source of which was not demonstrated, but was probably the right internal iliac vein or one of its large tributaries. The dissection was performed by one of the hospital attendants in the presence of Surgeon-Captain Duer, but his skill was not sufficient to demonstrate this point. Having other surgical cases to attend to Surgeon-Captain Duer was unwilling to perform the dissection himself. All the other organs were healthy and uninjured.

Remarks by Surgeon-Captain DUER.—The above case seems to be worthy of note as what appeared to be an injury of no great severity was in reality very serious, and that the real extent of the wound was not manifest at a time when successful operative measures might have been adopted.

[1] Transactions of the Medical Society of London, vol. xvii., p. 269.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Annual Meeting.—Election of Officers.

THE annual general meeting of this society was held on March 1st, the retiring President, Dr. HOWSHIP DICKINSON, being in the chair.

The report of the Council and of the honorary treasurers was read and showed that the affairs of the society were in a favourable condition. Twenty-eight new Fellows had joined the society during the past year, while the losses from death or retirement were only sixteen. The financial position also showed an improvement, a number of debentures having been paid off, while Dr. Robert Barnes had returned two of his debentures as a donation to the funds of the society.

The PRESIDENT, in delivering his valedictory address, after alluding to the satisfactory state of the society, referred with much regret to the retirement of the honorary surgical secretary, Mr. Parker, who has completed his term of office, observing that in the laborious task of revising the by-laws he had done the greater part of the work. He also regretted that this year, for the first time for many years, Mr. Holmes did not hold office. He had held almost all the offices in the society and in addition to being President had been chairman of the Building Committee and of the House Committee. The President then read the usual obituary notices of the Fellows who had died during the past year, referring particularly to Mr. Oliver Pemberton, Dr. James Andrew, Mr. Walter Rivington, Mr. Greig Smith, Sir Rutherford Alcock, and Dr. Leonard Remfry.

On the motion of Dr. CHURCH, seconded by Mr. BRYANT, an enthusiastic vote of thanks was passed to Dr. Dickinson for the manner in which he had performed the duties of President during the last two years.

The usual votes of thanks were passed to the retiring officers and members of council and a special vote of thanks was passed to Mr. Holmes for his long services to the society.

The result of the ballot for the officers for the ensuing year was then declared and the following gentlemen were declared duly elected: President: Mr. Thomas Bryant. Vice-presidents: Dr. George Fielding Blandford, Dr. William Marcet, Mr. Frederick James Gant, and Mr. Reginald Harrison. Honorary treasurers: Dr. William Selby Church and Mr. J. Warrington Haward. Honorary secretaries: Dr. Norman Moore and Mr. Alfred Pearce Gould. Honorary librarians: Dr. Samuel Jones Gee and Mr. Rickman J. Godlee. Members of Council: Dr. William Henry Allchin, Dr. Robert Leamon Bowles, Dr. John Mitchell Bruce, Dr. Francis Henry Champneys, Dr. George Henry Savage, Mr. William Watson Cheyne, Mr. Henry Hugh Clutton, Mr. Frederic S. Eve, Mr. William Appleton Meredith, and Mr. Edgcombe Venning.

Dr. DICKINSON then invested Mr. Bryant with the collar of office and installed him in the presidential chair.

MEDICAL SOCIETY OF LONDON.

Abdominal Exploration as a Medical Measure.

A MEETING of this society was held on Feb. 28th, the President, Dr. SANSOM, being in the chair.

Mr. FREDERICK TREVES read a paper on the value of Abdominal Exploration as a Medical Measure. He observed at the outset that a great change had taken place in professional opinion as to the line which should be drawn between the province of medicine and surgery. He proposed to deal in his paper with those cases in which operation was performed but in which it was not possible to account for the benefits derived simply by the surgical measures adopted. The first class of cases to which he wished to draw attention was that in which remarkable effects followed simple incision, such as cases of tuberculous peritonitis. No less than 308 cases had been collected in which operation had been performed, and of these 69·8 per cent. were reported as cured and 34 per cent. remained well some years afterwards. But if the cases of suppurative peritonitis were put aside, treatment with ordinary surgical measures, such as drainage, application of iodoform had done no more than simple incision. Such incisions had been performed mostly under misapprehension, as in Spencer Wells' well-known case in which he opened the abdomen for a supposed ovarian tumour, and finding tubercle, hastily sewed up the abdomen, but the patient at once got well. One hypothetical explanation which had been offered was that the benefit was due to the admission of light into the peritoneal cavity, but very little light got in through the opening. He was inclined to think that the true explanation would be forthcoming when more was known about intra-abdominal pressure, of which at present little was known. He thought that it was impossible to tell accurately before opening the abdomen whether the pressure would be found to be positive or negative. The intestines might either be forced out or the peritoneum might be found closely clinging to the intestines. As an instance of the benefit sometimes seen from simple incision even in old-standing cases he mentioned a case in which chronic perityphlitis had caused ill health, making the patient bedridden. On opening the abdomen the appendix was found surrounded by old tuberculous matting and it was left alone as being beyond the reach of surgery, but as the result of that simple incision the patient got well. He also quoted a case of pylephlebitis which occurred on the eighth day of a sharp attack of perityphlitis, there being a temperature varying from 102° to 104° F., daily rigors, and delirium. The liver on exploration on the thirty-first day was found to be as soft as a lung and much enlarged, the surface being dotted over with minute yellow specks. The abdomen was closed without anything being done, but the rigors stopped and the patient made an immediate recovery. In another remarkable group were the cases of malignant disease in which shrinking of the growth occurred after simple incision, and this had been seen not only in the case of sarcoma of the peritoneum but also in retro-peritoneal sarcoma. In one case, that of a young man, on exploration he found a retro-peritoneal sarcoma of the size of two fists. The abdomen was closed and retrogression of the tumour continued for three months till it could hardly be felt, and then it began to increase and rapidly killed the patient. This retrogression was also seen in the case of malignant stricture of the pylorus. In one such case a man who was in a very miserable condition before exploration was so much improved that he was able to resume his work as a hall porter, but the symptoms afterwards returned and caused death. In another group he placed the "nervous" cases and quoted first cases in which the symptoms approximated to those of recognised forms of disease. He mentioned the case of a middle-aged woman who was supposed to have chronic perityphlitis, and who insisted on having her abdomen explored. There were constipation, tenderness (chiefly cutaneous) in the right iliac region, and occasional vomiting. As she had been an invalid for twelve months and medical measures had had no effect, Mr. Treves cut down and found the appendix and surrounding parts quite healthy. He removed the appendix for the moral effect on the patient, and all the symptoms vanished. A similar train of symptoms also occurred in a young woman, and in her case the removal of an appendix which was perfectly normal microscopically completely relieved her nervous symptoms. Occasionally, however, cases were met with which did not simulate known diseases and he mentioned one which occurred in a woman, twenty-four years of age, who had had several operations on her abdomen for violent paroxysmal pain. Five months before admission to the London Hospital she was said to have been seized with fæcal vomiting, a condition which Mr. Treves believed rarely to be due to obstruction unless there was a fistulous communication between the stomach and the transverse colon. Previous to the onset of this vomiting she was said not to have passed any motion for four weeks. She was admitted to the London Hospital, where nothing abnormal could be discovered, but after a few weeks the bowels ceased to act and fæcal vomiting returned and she also vomited nutrient enemata and there was a rise of temperature to 109°. (This she subsequently said that she managed by squeezing the thermometer with her teeth.) She was watched and an ounce of castor oil was injected into the rectum. In

ten minutes this was returned by the mouth. Next a pint of water coloured with methylene blue was given. In ten minutes exactly a pint of water of a blue colour was rejected by the mouth. As her condition was getting worse Mr. Treves reopened the abdomen, and the colon was found to be perfectly normal and there was no sign of a gastro-colic fistula. After the operation she went through the performance of dying according to popular ideas, but she spoilt the picture by constant screaming. She was therefore removed to an isolation room, and all the symptoms ceased as soon as she had no appreciative audience. She explained how she managed to raise the temperature record, but it was never ascertained how she managed to bring the enemata out of her mouth. Cases of intestinal hypochondriasis were also met with in which exploration was followed by disappearance of all symptoms. The cases usually occurred in men and were associated with pain at a spot to the left of and below the umbilicus, often with a sensation suggesting to the patients that there was a stricture. Usually there was a contracted sigmoid flexure which could be felt the size of one's thumb and could be rolled under the hand. He thought these cases occurred in patients who had habitually had too frequent action of the bowels; in other words, undue irritability of the colon. After a time the irritability resulted in spasm. It was in these cases, he believed, that opium acted as an aperient. In many cases of chronic constipation which had not yielded to remedies he had found a flabby inert sigmoid flexure, occasionally complicated by a few adhesions or the presence of a tumour, or there might be acute flexion of the transverse colon, or the sigmoid flexure might be extremely short and bound down by adhesions, and sometimes he had seen a great deposit of retro-peritoneal fat in a patient who was not otherwise fat. He wished to call attention to a form of pelvic cellulitis occurring in men which started from the bowel and was often mistaken for peritoneal sarcoma. He mentioned the case of a medical man, forty-eight years of age, who had been overworked and much exposed to the weather. He had symptoms of acute colitis, followed by severe pain in the rectum and perineum, constipation, and the passage of much mucus. He lost flesh and on examination of the rectum a mass was felt blocking up the pelvis. This in time all cleared up. In another case a patient, seventy years of age, who had an enlarged prostate and had always had constipation alternating with spurious diarrhœa, began to complain of pain in the buttocks, perineum, and rectum, together with a good deal of fever and alarming prostration. A mass was felt per rectum which was taken to be a malignant mass, but when the patient was examined some months later it had nearly disappeared. He believed that in these cases there was first a stercoral ulcer of the colon and cellulitis extending from this point. Dilatation of the stomach and intestines was by no means always the result of distension with gas. Thus, in so-called ballooning of the rectum there was no collapse when the speculum was introduced and he had seen a case in which a large opening was made into a dilated stomach in performing gastrostomy and yet the stomach remained of the size of the patient's head. The so-called idiopathic dilatation of the colon he believed always to be due to congenital narrowing of the lower bowel, and in one such case he had removed the narrowed rectum and descending colon and brought the transverse colon down to the anus. Mr. Treves remarked on the difficulties due to the variable position of the linguiform lobe of the liver. He was obliged to abridge the remarks which he had intended to make on the surgery of the liver, but quoted one case in which the diagnosis had been of extreme difficulty. A young woman, nineteen years of age, had been deeply jaundiced since she was two years of age and possibly longer. The urine was mahogany coloured and offensive and lately there had been epistaxis and bleeding from the gums. Dr. Lauder Brunton, who was in charge of the case, thought that there was probably either congenital absence or atresia of the common bile-duct. On exploration the gall bladder was found to be present and full of bile, but on opening it and passing a probe down into the common duct it was found firmly closed by a hard fibrous nodule. Mr. Treves therefore established a communication between the gall bladder and jejunum and although the operation was only done a few weeks ago the urine was already much lighter in colour and the discolouration of the skin was less profound. While his paper showed that great benefit often followed a surgical exploration Mr. Treves wished to deprecate undue haste in resorting to it, as such practice must tend to less careful and thorough investigation of the case by ordinary methods.

Dr. LAUDER BRUNTON, after complimenting Mr. Treves on his paper, said that he thought that there was reason to believe that tuberculous disease other than peritonitis was relieved by abdominal incision. In this connexion he mentioned the case of a woman who had had severe pain in the right iliac region for several years and then developed marked phthisis with signs of a large cavity at the left apex. At her urgent request the abdomen was opened and it was found that there were chronic appendicitis and much tuberculous matting around the cæcum. The abdomen was closed without anything being done, and not only did the abdominal condition get well but the lungs improved and were now nearly normal. The only explanation he could think of was that the admission of air into the abdominal cavity might cause a change in some of the albuminous substances, converting them into antitoxins. It seemed to him not altogether fanciful to believe that abdominal surgery might be extended to the cure of phthisis. Another remarkable condition was paroxysmal pain occurring especially in gouty persons and coming on usually in the early hours of the morning. This condition was often due to adhesions, and in one case in which the pain was on the left side adhesions were found on the right. Their division at once freed the patient from the pain.

Mr. BRYANT said that he was accustomed to lecture twice a year at Guy's Hospital on his mistakes. Many of the cases quoted by Mr. Treves were mistakes in that the operations were undertaken for the relief of a condition which was not present. He (Mr. Bryant) remembered two cases referred to him for operation by an obstetric colleague as cases of ovarian tumour. In one there was a gush of fluid from some encysted collection and in the other there were so much obliteration of the peritoneal cavity and thickening of the bowel wall that the bowel was wounded. The abdomen was sewn up in each case and the patients recovered. The cases of displacement of the colon which Mr. Treves had referred to were very important and he wished that Mr. Treves had been able to say more about the diagnosis of the condition.

Dr. F. J. SMITH asked as to the best method of removing ascitic effusions. If aperients and diuretics failed he preferred, at any rate with hospital patients, to get the surgeon to make an exploratory incision, as it involved less risk of sepsis and much information might be obtained by digital exploration. He remarked on the variable position of the appendix. Usually it was tucked behind the cæcum but sometimes it dipped down and was in contact with the ovary and might give rise to confusion in diagnosis.

Mr. ALBAN DORAN said that he had seen genuine fæcal vomiting in a case in which there was some obstruction combined with the presence of irritating food. He thought that in Mr. Bryant's first case there was probably either a cyst of the urachus or an encysted collection the result of some past attack of tuberculous peritonitis.

Mr. TREVES, in reply, agreed with Dr. Smith that the evacuation of fluid by incision had great advantages. He believed that genuine fæcal vomiting in cases of obstruction was very rare. Foul-smelling brown lumps were sometimes vomited, but on examination they proved to be altered curd of milk.

PATHOLOGICAL SOCIETY OF LONDON.

Test-tube Reactions between Cobra Poison and its Antitoxin.—Traumatic Aneurysm of the Innominate Artery.—Congenital Sarcoma of the Liver.—Ulcerative Enteritis.—Hydatid Cyst of the Liver.—Retro-peritoneal Cyst.—Tumour of the Pulmonary Valves.—Miliary Thrombosis of the Kidneys.—Mycetoma.

A MEETING of this society was held on March 1st, the President, Dr. PAYNE, being in the chair.

Dr. J. W. W. STEPHENS and Mr. W. MEYERS read a paper on Test-tube Reactions between Cobra Poison and its Antitoxin. The experiments were undertaken to throw light on the much-disputed question of the mode of action of antitoxins. In brief, the two main views are: (1) that the cells of the animal body are necessary for the action of an antitoxin to make itself felt (Roux and Metchnikoff); and (2) that the antitoxin and toxin react chemically upon one another and that they can do so without the assistance of the living organism (Ehrlich and Kanthack). The actual experimental

observations which suggested the particular mode of experimenting were the following. Professor Kanthack in October, 1896, before the Physiological Society demonstrated the observation made by Brigade-Surgeon-Lieutenant-Colonel D. D. Cunningham that cobra poison when mixed with shed blood in a test tube prevents coagulation, but he also showed that this action could be prevented by previously mixing the poison with anti-venomous serum—the mixture now coagulating as normal blood-clots—and finally he showed that the action of the serum was specific, diphtheria antitoxin having no such effect. In 1897 Ehrlich performed experiments upon the action of a solution of ricin *in vitro* on citrated blood. The clumping and precipitation of the blood cells which resulted could be completely done away with by previously mixing definite quantities of anti-ricin serum, and the mixture was also innocuous on injection into mice. Mr. Stephens and Mr. Meyers accordingly were led to look for other reactions between a toxin and its antitoxin which could be demonstrated *in vitro* and at Professor Kanthack's suggestion were led to examine (1) the action of cobra poison on the blood *in vitro;* (2) the effect of Calmette's antitoxin upon this action; and (3) whether the "neutral point" *in vitro* was also the neutral point *in corpore* for the animal whose blood was used in the experiment. Observations were made to see if the antitoxin neutralised the normal hæmolytic effect of cobra poison. Most of the experiments were performed by mixing known volumes of blood and poison solutions in small test tubes and—after about twelve hours—noting which of a series of tubes showed any hæmoglobin in solution. They pointed out the necessity for dissolving the poison in solutions which were isotonic or only slightly hypertonic for the particular blood under investigation so that the action of the poison could be estimated. Dr. Stephens and Mr. Meyers found that the hæmolytic action could be completely arrested by definite quantities of serum. Repeated observations showed that 0·1 c.c. of isotonic serum was always sufficient to arrest the hæmolytic action of 0·1 milligramme of poison on guinea-pigs' blood. They found that when they used larger amounts of poison, although completely neutralised as regarded hæmolysis, yet on injection into animals they were rapidly fatal. They based their explanation of this fact upon the work of Mitchell and Lembert and Martin, who have come to the conclusion that snake poisons are composed of at least two, probably more, proteid constituents and they suggested accordingly that the poison may contain, in addition to the toxic substance which is neutralised by the serum, another toxic substance which is not so neutralised by the amount requisite to prevent hæmolysis. The similar observation made by Wasserman on pyocyaneus toxin was explained by Mr. Meyers on the supposition that the large quantity of toxin present paralysed the cells in the body and prevented the tissues modifying the antitoxin from its inactive to its active form. Dr. Stephens and Mr. Meyers, however, agree with the opinion expressed by Ehrlich that the toxin and antitoxin react chemically *in vitro*. They summarise their results thus: (1) cobra poison is strongly hæmolytic *in vitro;* (2) this action is neutralised by antivenomous serum and the action of the latter is specific; (3) for certain doses (0·1 milligramme) the measure of this neutralisation *in vitro* is a measure of the neutralisation *in corpore* for guinea-pigs; and (4) this neutralisation is chemical and not cellular or vital.

Mr. GEORGE HEATON showed a Traumatic Aneurysm of the Innominate Artery which caused death by rupture into the sac of the pericardium twenty-nine days after the wound of the blood-vessel. The sac lay behind the manubrium sterni, having the arch of the aorta forming the floor, the left innominate vein being incorporated in its front wall. The innominate artery lay in the posterior wall of the sac. About half an inch above the origin of the innominate from the aorta was an oval opening leading directly into the aneurysmal sac. The long axis of the opening measured a quarter of an inch in length and lay in the long axis of the blood-vessel. The walls of the aneurysm varied much in thickness and were covered on their inner surface with adherent blood-clot. There was an irregular rent in the floor of the aneurysm opening into the pericardium. The wound was caused by a pocket-knife. The only signs the aneurysm gave during life of its existence were abductor paralysis of the right vocal cord and some dulness behind the manubrium. The specimen was one of extreme rarity, if not unique.—Mr. GEORGE HEATON also showed a specimen of Congenital Sarcoma of the Liver, which weighed 49 oz. and was taken from the body of an infant, aged eight weeks. The abdomen was noticed to be very much enlarged at birth and increased rapidly until the child's death. There was no evidence of syphilis or leukæmia. The spleen was normal in size. There was a small secondary growth in the right suprarenal capsule. The liver was uniformly enlarged and presented when fresh a mottled or marbled appearance on its surface. This appearance was due to patches of a dark red colour separated by pale ones. A microscopic examination showed a general infiltration of the liver by a small round-celled sarcoma. The sarcoma cells apparently invaded the liver tissues along the blood-vessels.

Mr. C. P. WHITE showed a specimen of Ulcerative Enteritis from the small intestines of a man, aged forty-two years, who for five years had had recurrent attacks of acute abdominal pain with diarrhœa and was admitted under the care of Dr. Rickards to the General Hospital, Birmingham, on Jan. 21st, 1898. At the necropsy numerous ulcers were found in the jejunum and upper part of the ileum, several of them extending completely around the bowel. The most recent of the ulcers were covered with a thick false membrane which was bile-stained. Five ulcers had perforated and given rise to extravasation of the intestinal contents and septic peritonitis. Peyer's patches and the solitary follicles were not enlarged. The lower part of the ileum and the large intestine were healthy. The spleen was normal and the mesentery was enormously thickened by enlargement of the glands which were white and firm. Microscopically the false membrane was seen to be formed by necrosis of the mucous membrane. The glands showed a large increase of fibrous tissue. Cultivations were made from the membrane and the glands, but only a pure culture of bacillus coli communis was obtained. Other organisms, however, could be stained in sections by Gram's method.

Mr. THOMAS CARWARDINE showed a pendulous Hydatid Cyst of the Liver resembling an enlarged gall-bladder. The specimen was taken from the body of a woman who was admitted to the Bristol Hospital with a history of having had a swelling in the region of the gall-bladder for some months associated with paroxysmal attacks of pain and rigors. On Dec. 16th, 1897, an exploratory incision was made through the abdominal wall and a cystic tumour was found below the liver. A few days later the wound was re-opened without an anæsthetic and the liver and the cyst were incised. It was noteworthy that the incision into the liver caused no pain. Thirty ounces of bile-stained, highly albuminous fluid were evacuated and a day or two afterwards hydatid membrane and hooklets were passed through the wound. A few days later symptoms of nephritis developed for some unexplained reason and the patient died from uræmia. At the necropsy the gall-bladder was found to be full of pus, explaining the rigors which occurred in the early stage of the illness.

Mr. C. B. LOCKWOOD exhibited a Retro-peritoneal Cyst supposed to have originated in remains of the Wolffian body. The cyst was of the size of an ostrich egg and had been removed by operation from a young woman aged twenty years. It had been noticed for two years; it was quite painless and freely moveable. It was situated behind the peritoneum; the left colon lay to its outer side, the transverse mesocolon above, and the beginning of the jejunum internally. Its nature was not diagnosed, but speculations were in favour of some form of renal tumour. The cyst was unilocular with walls rather more than an eighth of an inch thick and composed of connected tissue and blood-vessels. Its interior was filled with altered blood-clots without any trace whatever of hooklets of daughter cysts and it felt very hard and tense and did not fluctuate. It was removed without difficulty, the patient making a rapid recovery. It had no connexion whatever with the kidney, pancreas, or intestine; indeed, the pancreas was not seen during the course of the operation. As regards the origin of the cyst it was demonstrated that until at least the third month of intra-uterine life the upper part of the Wolffian body persisted along the course of the ureter and in the position in which the cyst had grown. Considering that cysts originate so frequently in the lower part of the Wolffian body, where it is related to the ovary or testis, it seemed not unreasonable to assume that the upper part had given origin to the cyst in question. As regards the frequency of such cysts it was suggested that some of the so-called pancreatic cysts may have had a similar origin. Another case of almost exactly the same character was also

described, but in this the cyst was multilocular.—Dr. ROLLESTON agreed that some so-called pancreatic cysts had their origin in the remains of the Wolffian body. He mentioned a case which Mr. Alban Doran showed at the Medical Society of London of a cyst removed from the region of the tail of the pancreas and if he remembered right Mr. Doran suggested that it was of Wolffian origin. He confirmed what Mr. Lockwood had said that the suprarenal body came as low as the hilum of the kidney and accessory suprarenal tissue could sometimes be traced as low as the epididymis.—Mr. SHATTOCK said that Mr. Doran's tumour was clearly pancreatic, since the contents rapidly digested starch.—Dr. ROLLESTON pointed out that several observers had maintained that the fluid from other than pancreatic cysts had this power.

Dr. RAYMOND CRAWFURD showed a Heart with a Tumour of the Pulmonary Valves together with sections from the tumour. Clinically the case was remarkable for the fact that the patient suffered no inconvenience from its presence until the moment of his sudden death at the age of seventy-two years. The tumour was growing from the posterior cusp of the pulmonary valves and the contiguous portions of the artery and of the wall of the right ventricle. It was roughly ovoid in form, deeply lobulated, elastic, and greyish-white and glistening in appearance; one or two dark patches at the surface suggested minute hæmorrhages into its substance. It was 5 cm. in length and 3 cm. in its transverse measurement; it was sessile and its centre was on a level with the centre of the pulmonary valve; above this point it extended 3·5 cm. upwards into the pulmonary artery and 1·5 cm. downwards into the right ventricle. The fixed base of the tumour seemed to extend about 1 cm. in every direction from the centre of the posterior cusp of the pulmonary valve. There was no obvious dilatation of the pulmonary artery and its channel was completely blocked by the tumour except for a sinuous furrow along its anterior surface with a channel about equal to that of the brachial artery. The wall of the artery did not appear to be infiltrated by the tumour. Death was almost certainly due to sudden occlusion of the pulmonary orifice. The microscope showed pretty clearly that the tumour consisted of granulation tissue in all stages of development, replacing an initial thrombus. There was evidence, also, to show that the thrombus had been gradually deposited from the circulating blood. A malignant character of the tumour was strongly negatived both by the microscope and by the clinical history. A radiotint photograph of the gross specimen showed how accurately the appearance of fresh specimens could be reproduced by this simple method.—The specimen was referred to the Morbid Growths Committee.

Dr. F. PARKES WEBER showed Kidneys with Miliary Infarcts. Both kidneys in a chronic cardiac case were found at the necropsy studded with small, irregularly shaped, sharply defined blotches of an opaque yellowish white colour situated in the cortex beneath the capsule. Some of these pale blotches had a wedge-like shape similar to that of minute anæmic infarcts. Mr. Shattock found that the pale appearance of these areas was due to a localised fatty degeneration of the renal epithelium and that some of the small renal blood-vessels were full of short, plump bacilli, doubtless bacteria coli. In the case in question it was possible that the microbes reached the renal vessels a day or two before death and by their presence induced plugging of minute blood-vessels, fatty degeneration of the kidney substance supplied by these vessels being the result.

Mr. S. G. SHATTOCK exhibited a specimen of Madura Disease of the Foot in which there was present an unusual and highly pronounced Papillary Condition of the Skin. No similar case had been described by Dr. Vandyke Carter or others and he ventured, following the example of dermatologists, to give it a new name—i.e., Mycetoma Papillomatosum. the coarse papillary processes, some of which were smooth, whilst others bore papillæ like those on the intervening integument, were hollowed out by spaces holding the fish-roe-like grains or colonies of the streptothrix maduræ. Whether the anomalous result arose from an unusual invasion of the cutis by the microphyte or from some other less specific cause he could not say. In filarial elephantiasis a somewhat similar cutaneous condition was well known and in rare cases a papillomatous condition followed upon eczema which was classed in the Dermatological Catalogue of the Museum of the Royal College of Surgeons of England as elephantiasis papillomatosus.

CLINICAL SOCIETY OF LONDON.

Laminectomy for Spinal Paraplegia.—Achondroplasia.—Xerodermia Pigmentosa.—Retained Testis.—Muscular Wasting after Empyema.—Immediate Reduction of Spinal Caries.—Lupus of the Nose treated by Tuberculin.—Congenital Dislocation of the Hip.—Rupture of the Ligamentum Patellæ.—Gastro jejunostomy.

A MEETING of this society was held on Feb. 25th, the President, Mr. LANGTON, being in the chair.

Mr. J. HUTCHINSON, jun., showed a girl, aged twelve years, after recovery from Pressure Paraplegia for which laminectomy had been performed. The spinal symptoms came on when she was ten years of age, eighteen months before admission, the spinal curvature having occurred much before this. She had been treated by rest, galvanism, &c., and on admission there were complete motor paralysis of both legs, ankle clonus, and marked anæsthesia of the legs and abdomen, the knee jerks were exaggerated, and the plantar reflexes were extremely marked. There was imperfect control of the bladder. There was an extensive "hump" in the upper dorsal region. Laminectomy was performed in December, 1895, the laminæ of four upper dorsal vertebræ being removed. The patient was sent out in February, 1896, little benefited, having still motor and to a less extent sensory paralysis and tendency to frequent involuntary flexion of the thighs. She was readmitted in July, 1896, for cystitis and at that time a note was made that no benefit had accrued from the operation although pressure had been completely removed from the back of the cord. The apparent failure of the operation to improve the paralysis pointed to chronic inflammatory change in the cord itself as the result of the operation having been too long deferred. About nine months after the operation, however, the patient began steadily to improve, sensation being the first to return. Ultimately muscular power was completely restored. She could now walk two miles, the back was perfectly strong, and new bone appeared to have developed at the site of the operation.

Mr. F. C. WALLIS showed a man, aged thirty-eight years, in whom he had performed Laminectomy for Paraplegia two years ago. There was a strong family history of phthisis. He was admitted in March, 1896, having complained eighteen months before admission of pain at the bottom of the spine, pins and needles, loss of power, &c., for two months previously. There were no anæsthesia and no bladder trouble, but he complained of girdle pain. When admitted he had complete paraplegia and prominence of the lower dorsal vertebræ. On March 28th laminectomy was performed, three laminæ being removed. Ten days later the pain had disappeared and three weeks later power began to return in the legs. He was now able to walk with practically no support and was able to do some work. Recovery was delayed through the occurrence of an attack of phlebitis in the right leg for which no explanation could be found.

Dr. A. E. GARROD showed a girl, aged six years, who exhibited the characteristic features of Achondroplasia—a deep depression at the root of the nose, marked lordosis, shortness of the limbs especially of the humeri and femora. The bones of the cranial vault, which were formed in membrane and not cartilage, were well developed. The thyroid treatment had been tried for some months without any obvious benefit. He pointed out that in this disease, which had been described as fœtal rickets, the cartilage cells underwent some alteration resulting in a condition of dystrophy and arrest of ossification. While ossification from the periosteum went on in the usual way the process in cartilage was arrested, the bones becoming very dense and bossed, but not increasing in length. He pointed out that the disease was apparently limited to the first half of the intra-uterine life and the majority of cases were in stillborn infants. Those who survived exhibited the results of the disease and not the disease itself. He thought syphilis might be excluded and the disease did not appear to be related to cretinism. Thyroid treatment had had no effect. There was no mental defect whatever. Contrasted with a normal child of the same age it was found that there was marked shortening of the limbs, but the spine of his patient was longer than that of the other child.

Dr. J. H. DRYSDALE showed three sisters, aged fifteen years, thirteen years, and nine years, who exhibited a dwarfed appearance similar to that of Dr. Garrod's patient. They

however, exhibited some contrasts. There was not the deep depression at the root of the nose and there was not the same disproportion in the lengths of the spine and the limbs. There was a curious spade-like condition of the hands, the thickening affecting the soft parts as well as the bones. Treatment with thyroid extract had been of no benefit. The best designation for the condition would be chrondrodystrophia hyperplastica.

Dr. J. J. PRINGLE showed a girl, four years of age, suffering from Xerodermia Pigmentosa, a rare condition of which there were only sixty-five cases on record. She was the child of a market gardener and the arms and face had been much exposed to the sun, and when she was quite small the skin was noticed to become deeply freckled, the freckling not disappearing at all during the following winter. The following summer it became worse and in the following winter lumps developed at the side of the nose. At the present time there was much freckling with a good deal of diffuse dermatitis, a number of spots of telangeiectasis, and some horny growths on the upper lip which were really epitheliomata. He had treated the dermatitis by a method suggested by the observations of Dr. Bowles, who found that sunburning when climbing in the Alps did not occur if the face were coated with some brown paint. He had applied an ointment consisting of lard containing eosine and primrose yellow and considerable improvement had resulted. He intended to scrape away the horny growths. He showed drawings of a similar case which he had treated in 1888 by energetic scraping of the growths. All trace of them except the scars left by the scraping had disappeared by the time that the child was fifteen years old.

Mr. G. R. TURNER showed a man, fifty-six years of age, who had a Retained Testis and an Abdominal Tumour. He was the father of six children. He had always had a swelling the size of an egg in his scrotum. In 1871 he had malaria very severely, the attack being accompanied by much vomiting, and a swelling showed itself above the groin. At the present time there was a large soft swelling occupying most of the lower part of the abdominal wall to the left of the umbilicus. The tumour was resonant and if not composed of bowel had bowel over it. On one occasion, however, when he was examined there was dulness over the tumour. A hard body the size of a chestnut could be felt freely moveable near the left anterior superior spine. Several diagnoses had been formed—cystic condition of a retained testis, retro-peritoneal fatty tumour, and interstitial hernia. He himself was in favour of the last.—The PRESIDENT also took the view that the tumour was an interstitial hernia, a condition which was not so very rare, especially on the right side, and he thought that it was a congenital condition. The testis was almost always retained and the external ring was small and tightly compressed by the intercolumnar fascia. A hernial protrusion got into the canal and gradually distended it, giving rise to a swelling outside the linea semilunaris, more easily seen when the patient was recumbent than when erect. It sometimes ripped up the tendon of the external oblique and became subcutaneous. The tumours rarely gave rise to much inconvenience. Occasionally strangulation occurred and necessitated operation. In that case there was often great difficulty in reduction as the internal ring was displaced and extremely difficult to find.—Dr. ROLLESTON thought that possibly it might be an example of perirenal lipoma of congenital origin which had prevented the descent of the testis. On one occasion on which he had examined the tumour there had been dulness over it. He remarked that Dr. Adami had collected forty such cases.

Dr. CAYLEY showed a young man, twenty years of age, who presented Muscular Wasting following double Empyema. On Nov. 1st, 1897, he had part of the tenth rib removed at its posterior end and the pleura opened and ten days later a piece of the corresponding rib on the right side was removed. Before he left the hospital a fortnight later he had noticed some difficulty in raising the arms and on his return from a convalescent home there was marked paralysis of both serrati and of the left infra-spinatus which was very much wasted. There was at first loss of reaction to both currents, but latterly some recovery of power was taking place under treatment with galvanism and hypodermic injections of strychnia and the electrical reactions had improved. It was difficult to account for the paralysis, as the incisions were too far back to have wounded the long thoracic nerve or the serratus muscle. It was pointed out to him by Mr. A. Robinson that the long thoracic nerve and the nerve to the infra-spinatus came off close together from the brachial plexus, and were in close proximity to the dome of the pleura, and it was conceivable that they might have become inflamed through extension of the intra-thoracic inflammation.

Mr. COTTERELL showed a child, aged five years, suffering from Spinal Caries who had been treated by Calot's Method of Immediate Reduction. She was treated by rest and double extension but without any improvement. In September, 1897, he extended the spine under chloroform and fixed the patient in a plaster jacket. Within a week movement in the legs began to return and progress had since been steadily maintained. The jacket was removed on Feb. 18th, 1898. The patient could now walk, run, and jump without pain or discomfort.

Dr. HERON showed a case of Lupus of the Nose cured by the New Tuberculin. The patient was a man, aged twenty-seven years, who came to him with lupus vulgaris involving the whole of the left nostril within and without the bridge of the nose and the left ala. There was another patch on the front of the lip and the right ear. The treatment was commenced on April 20th, 1895, and completed on Aug. 20th, the T.R. tuberculin being used. The total amount administered was 126·5 milligrammes given in sixty-two injections. The dose varied from $\frac{1}{100}$ to 4 milligrammes. On July scar tissue only was seen over the sites where the lupus patches had been and by July 18th these had entirely healed. The man gave a history of syphilis, consisting in a chancre with sore throat, but personally he thought the chancre was probably a patch of lupus. He pointed out that the temperature after the injections rose to 102° and was maintained at about 100°. He thought this reaction was useful from a diagnostic point of view.—Dr. BALMANNO SQUIRE thought that the diagnosis of lupus vulgaris was open to doubt. The scars resembled those of syphilitic eruptions and the patient's age was against the occurrence of lupus. He admitted that tuberculin was not supposed to cause any reaction in cases of syphilis.—Mr. COTTERELL said that he had tried the treatment with tuberculin in an undoubted case of lupus, but although there was an inflammatory reaction not the least improvement took place in two months and the treatment was abandoned.—Dr. STCLAIR THOMSON thought that the scars suggested that the disease was a syphilitic one and that was confirmed on examining the interior of the nose, in which the disease was by no means cured, and there were indications that there was necrosis of bone.—Mr. JONATHAN HUTCHINSON, jun., pointed out that the patient had had a node on the shin which had been treated with iodide of potassium and inquired whether the patient was taking the drug while the improvement was taking place.—Dr. HEBON, in reply, said that the node was the result of a blow which was not received till after the patches had nearly healed, so that the administration of iodide of potassium could not be responsible for it. He questioned whether it was possible for anyone to diagnose the syphilitic nature of the scars from their appearance.

Mr. BRODHURST showed a man, aged twenty years, the subject of a Congenital Dislocation of the Hip on whom he had operated by subcutaneous division of the adductors and certain trochanteric muscles. He was then enabled to restore the head of the bone to its place with excellent results, although before the operation there was shortening to the extent of three inches.

Mr. WATSON CHEYNE showed a man who was brought to the hospital having, it was thought, Ruptured the Ligamentum Patellæ. On cutting down, however, he found little trace of that structure. He was unable to find any ends to join, so he inserted stout silver wires which he passed through the tubercle of the tibia, taking advantage of the opportunity to bring together the shreds of tissue that remained with catgut suture. The man left the hospital eighteen days after the operation and now had very good movement though he was careful at present not to bend the knee too freely.

Mr. COTTERELL showed a man, aged fifty-eight years, who, in November, 1897, had come with Symptoms of Pyloric Obstruction. He steadily became worse, so Mr. Cotterell cut down and performed gastro-jejunostomy. The patient's weight at that time was 8 st. 12 lb. and had since risen to 11 st. 12 lb., a gain of 3 st. The patient declared that he had never felt better in his life.

MANCHESTER THERAPEUTICAL SOCIETY.

Treatment of Gastric Ulcer.—Antitoxin Serums

THE fourth meeting of this society for the session 1897-98 was held at the Owens College on Feb. 23rd, Professor LEECH, the President, being in the chair.

Professor DRESCHFELD made a communication on the Treatment of Gastric Ulcer by large doses of Bismuth. He mentioned the experience of Fleiner, who obtained good results by the injection of from 20 to 30 grammes (from 300 to 450 grains) of bismuth in suspension in water into the stomach by means of a tube after previous lavage of the stomach. He also referred to the work of Mattheys on the action of bismuth in hastening the cure of experimentally-produced ulcers in the stomachs of dogs. Professor Dreschfeld pointed out the inconveniences and dangers of using the stomach-tube in cases of gastric ulcer and stated that he had observed excellent results by giving large doses of bismuth by the mouth after ordinary doses had proved unsuccessful. Doses of from 30 to 40 or even 50 grains of bismuth subnitrate were given three times a day suspended in water. Under these pain was rapidly relieved, vomiting ceased, digestion improved, allowing light nitrogenous food such as fish or fowl to be given, and the ulcer quickly healed. He had not seen any bad effects from these large doses other than a little pain and diarrhœa—never constipation. He had used this treatment chiefly in chronic cases, but in some acute cases after recent hæmatemesis it had proved successful. In acid dyspepsia, too, it rapidly relieved the symptoms. In neuræsthenic conditions with symptoms resembling those of gastric ulcer it had also been of great benefit. Two cases of gastric ulcer which were not relieved by large doses of bismuth given by the mouth were cured by carrying out Fleiner's method of lavage of the stomach and injection of the bismuth by means of a tube.—Several members took part in the discussion which followed Professor Dreschfeld's communication.

Dr. WILD showed specimens of Diphtheria Antitoxin Serums and compared the cost of the different preparations.—Professor LEECH stated that he was at first sceptical as to the value of the antitoxin treatment, but a case in which a child, aged eighteen months, with severe laryngeal symptoms recovered under injections of serum convinced him that they had a powerful effect, as he had never seen a similar case in so young a child recover.—Dr. MARSDEN related his experience of the use of antitoxin at the Monsall Fever Hospital. They used there the serum of the British Institute of Preventive Medicine, injecting a dose of 3000 units at once, except in children under eighteen months, when they used a dose of 1500 units. He had never seen any ill effects from injecting the whole dose at once. Often there was no appreciable local effect by the end of twenty-four hours and even up to thirty-six hours after injection. By the end of forty-eight hours, however, the membrane was thinner or almost gone; in many cases it seemed to melt rapidly away. When septic ulceration was present as well the effects were not so rapid or marked, but by the end of forty-eight hours some improvement was manifest. The general effects of the antitoxin included relief of the throat symptoms, fall of temperature, and diminution of membrane. He thought it was desirable to inject antitoxin even if the patient did not come under treatment till the seventh or eighth day of the disease. He did not think antitoxin contributed materially to produce nephritis. More of the severe cases recover or hold out longer under the serum treatment, thus giving more time for secondary results to follow. In one case presenting grave nephritis with a very large proportion of albumin in the urine antitoxin injections were made and the patient recovered. The ill effects which he had seen were troublesome rashes, but these were more frequent in the early days before the serum was supplied so concentrated. He had seen cellulitis occasionally at the site of injection, but in one instance only did this go on to suppuration.—Professor DRESCHFELD said that he had seen bad cases do very well when injected early, but he had also seen cases die although injected on the first day. He had not found prophylactic injections very successful.—Dr. HARRIS considered that antitoxin was certainly of great benefit in laryngeal cases, especially those requiring tracheotomy.—Dr. COUTTS gave the statistics compiled by the American Pediatric Society's committee for the collective investigation of the value of antitoxin in laryngeal diphtheria and also the figures recorded in the practice of Dr. O'Dwyer and in that of Dr. Dillon Brown, comparing the results obtained with and without antitoxin. These figures show under antitoxin a reduction in the mortality from 70 per cent. to about 30 per cent. in cases of laryngeal diphtheria requiring intubation or tracheotomy, a striking testimony of the value of the treatment in an extremely severe class of cases.—Dr. WILD suggested that members might note and compare the effect of the different preparations in view of the marked difference in cost. On the question of statistics he pointed out that notwithstanding the introduction of the serum treatment the number of deaths from diphtheria in London had remained practically unaltered. The number of cases of diphtheria notified had increased largely, perhaps owing to the addition of cases bacteriologically diphtheritic, but not so clinically.—Mr. PLATT had performed tracheotomy for diphtheria without antitoxin in eight cases, all of which died. The only two cases in which he had performed tracheotomy when antitoxin was given both recovered.—Dr. HOPKINSON mentioned a case of sudden collapse after antitoxin injection.—Dr. MARSDEN stated that sudden death from diphtheritic toxæmia was not uncommon and he would not be disposed to blame the serum injections for the fatal collapse.

NORTH OF ENGLAND GYNÆCOLOGICAL AND OBSTETRICAL SOCIETY.

Exhibition of Specimens.—Perforation of the Uterus.—Cæsarean Section.—Gynæcological Aspect of Criminal Responsibility.

A MEETING of this society was held in the Liverpool Medical Institution on Feb. 18th, the President, Dr. J. W. MARTIN (Sheffield), being in the chair.

Dr. GLYNN WHITTLE (Liverpool) showed some Lubricating Pessaries.

Dr. BRIGGS (Liverpool) showed the Uterus and Microscopic Section from a well marked case of Adenoma Malignum of the Uterus.

Dr. DONALD (Manchester) read notes of a case of Perforation of the Uterus in which Vaginal Hysterectomy was performed. The patient had been attended by a medical man for profuse uterine hæmorrhage and on Dec. 16th, 1897, the medical attendant while exploring the uterus discovered that there was a hole in its posterior wall. He at once asked Dr. Donald to see the case with him. On arrival the patient was found in a state of extreme collapse, very blanched, and with a pulse as far as it could be counted of 150. Respirations were shallow and sighing and there was considerable restlessness. On vaginal examination the finger passed into the uterus and then through an aperture in its posterior wall into the abdominal cavity and into the tissues of the left broad ligament. Ether was administered, the parts were carefully disinfected and an opening was made with a snip of the scissors through the posterior vaginal fornix into the pouch of Douglas. This allowed of the escape of a large quantity of fluid and clotted blood which had collected in the abdomen and permitted the nature and extent of the tear to be made out from the peritoneal aspect. The uterus was then rapidly excised by Doyen's method, being first split up into two halves, each half dragged down to the vulva and a pressure forceps placed on each broad ligament from above downwards. The points of the forceps were then turned up into the pelvis and the gap in the vaginal vault was packed with iodoform gauze. The operation was performed in a workman's cottage at four o'clock on a December afternoon with the assistance of a district nurse and lasted about ten minutes. Dr. Donald remarked that he chose hysterectomy in preference to suture of the tear or plugging with gauze because of the rapidity with which it could be carried out and of the security against further bleeding. He thought the method might be adopted with advantage in some cases of rupture of the uterus during labour. The great advantage of the vaginal as compared with the abdominal incision lay in the almost complete absence of shock. The advantage of forceps over ligature in cases in which rapidity was essential was obvious.

Dr. GRIMSDALE (Liverpool) read notes of a case of

Cæsarean Section for Cancerous Tumour Obstructing Delivery. The patient was a woman, aged twenty-nine years, whose pelvis was blocked with a cancerous tumour originating in the rectum. Intestinal obstructive symptoms had necessitated the performance of lumbar colotomy by Mr. Thelwall Thomas at the fifth month of pregnancy. On what was reckoned to be the 268th day of gestation Dr. Grimsdale performed Cæsarean section. Both mother and child are alive.

Dr. GLYNN WHITTLE (Liverpool) read a note on a Gynæcological Aspect of Criminal Responsibility.

Reviews and Notices of Books.

Lectures on the Theory and Practice of Vaccination. By ROBERT CORY, M.A., M.D. Cantab., F.R.C.P. Lond. London: Baillière, Tindall and Cox. 1898. Price 12*s.* 6*d.*

AT a time when attention is being directed on all sides to the subject of vaccination the appearance of a volume from one whose experience in the practice is unrivalled cannot fail to be opportune, and Dr. Cory deserves the thanks of the public and the profession alike for having done them this great service. He has, he states in the preface, been engaged for twenty-two years in giving instruction upon the subject, and the instruction he has given is embodied in this volume, which consists of six lectures dealing respectively with the reasons for vaccination, the nature of the vaccine and small-pox vesicles, the differences between a primary and a secondary vaccination, post-vaccinal eruptions, the practice of vaccination and, lastly, the relation of cow-pox, horse-pox, and camel-pox to small-pox. Now, although there is hardly an aspect of the whole question of vaccination and small-pox left unnoticed it would be a mistake to suppose that the subject is exhaustively treated. It is obvious from the nature of the work that this could not be done, and it is perhaps an advantage that it has not been, for, after all, the side-issues, some of which are regarded by writers as of almost prime importance, such as the early history of vaccination, the sources of the lymph now in vogue, and many other matters that teem with points of contention—these sink into insignificance beside the central facts which are presented by Dr. Cory in a manner as convincing as it is impartial. The subject of the first lecture is entitled, "The Reasons which led the Legislature of this Country to Impose the Vaccination Laws upon the People and the Duty Entailed upon every Medical Man to Support these Laws at the Present Time." For, as he says, people are apt thoughtlessly to ignore the efficacy of vaccination and perhaps to magnify its ills owing to the fact that the horrors of natural small-pox are no longer familiar, and he does well to cite the striking testimony of Dr. Crosse, of Norwich, who, writing in 1820, pronounced a strong eulogium on the newly introduced discovery which had robbed small-pox of its terrors. Dr. Cory points out that the comparative freedom from small-pox at present enjoyed depends upon the diminished susceptibility of the population which is owing to vaccination, and upon another factor—namely, the diminution of infectiveness by the deportation of small-pox cases. Being himself persuaded of the dangers arising from small-pox hospitals which are situated within populous centres, and pointing to the marked decrease in London small-pox mortality that has followed upon the establishment of the ships and hospitals at a distance from inhabited areas, he does not, so far as we can gather, show that isolation alone would fail to cope with the disease, although we may infer, of course, that he is quite of this opinion. We know as a matter of fact that measures of isolation, theoretically perfect as they may be to stem the progress of an epidemic, have seldom, if ever, been able to do so completely, and to abandon the safeguard of vaccination which limits the extent and intensity of outbreaks would be disastrous and would in all probability lead to mistrust of the value of all other measures. For what has vaccination done? It has changed the incidence of small-pox, since no longer do infants and young children form the chief victims; it has reduced in proportion to its thoroughness the liability to epidemic invasion; and it has mitigated the severity of individual attacks. By a very careful study of a number of persons pitted with small-pox Dr. Cory was enabled to determine with fair accuracy the degree of protection which a primary vaccination affords, and he shows how the average age at which small-pox attacks occur (and are *recovered from*) increases from about six years in those who were never vaccinated to about nineteen years in those who presented five or more scars of infantile vaccination. It is surely remarkable that whereas amongst these individuals about 52 per cent. of the whole number (448) had never been vaccinated, yet the known proportion of the non-vaccinated in London is only 5 per cent. As to the objection that decline of small-pox has coincided with, and is probably due to, improved sanitary conditions rather than to vaccination, he pertinently points to the other zymotics, notably measles, and asks how it is that these prevail even more than they used to and amongst the young just as severely and fatally as ever. The second lecture deals with the Histology of the Vaccine and Small-pox Vesicles and is illustrated by some striking drawings. Incidentally the total dissimilarity in histological characters between these vesicles and the syphilitic chancre is pointed out. The third lecture treats of the Difference between a Primary and a Secondary Vaccination and is worthy of careful study, for it seems to afford an explanation of those differences which is reasonable and suggestive, besides accounting for the varying susceptibility not only to re-vaccination but to small-pox which is seen amongst the vaccinated. It may be noted in passing that a reason is given for the present fatality of small-pox amongst the non-vaccinated being higher than that obtaining in pre-vaccination days which is at any rate plausible—viz., that small-pox is no longer endemic and "natural immunity" is ceasing to be a factor. Whatever be the reason the fact of this difference does seem to be undoubted. The fourth lecture treats of the Eruptions that occasionally follow Vaccination and it might with advantage be ampler. It does, however, clearly bring out the fact that such eruptions depend on the individual vaccinated to a greater extent than upon the vaccinia. The fifth lecture is devoted to the Practical Details of Vaccination and it is needless to say that it is well considered and very useful. The facts with regard to re-vaccination are also most valuable and we could wish that this subject were more definitely worked out in relation to small-pox incidence than it has yet been. Lastly, the Natural History of Small-pox—or rather its relations to vaccinia, horse-pox, and camel-pox—is described in the sixth lecture, where the salient facts are presented and the reader is left to form his own conclusions.

Clinical Lectures on Urine. By J. ROSE BRADFORD, M.D., D.Sc., F.R.C.P. Lond., F.R.S. London: The Medical Publishing Company, Limited. 1898. Price 2*s.*

THESE lectures appeared in the course of last year in the columns of the *Clinical Journal*. They are nine in number and cover the whole ground in a manner which deserves the highest commendation. Indeed, for clearness of description and accuracy of observation they may be said to bear the palm in works of this useful class, so that the student may regret that there are not even more of

them. Moreover, they are just the kind of instruction that is wanted, and the subject gains by being presented in the expository form as well as being limited to the more important facts. The author speaks, too, with the authority of a skilled scientific observer, and on several occasions has to correct errors of interpretation, and indeed of fact, which have been handed down in text-books. We can heartily commend this *brochure* to all students of clinical medicine, and we trust it will not be long before another edition is called for, partly because of the intrinsic merit of the book and partly because it will afford an opportunity for the addition of an index, the absence of which is a grave defect and one that detracts somewhat from its utility.

Dictionary of National Biography. Edited by SIDNEY LEE. Vol. LII. Shearman—Smirke. London: Smith, Elder and Co. 1897. Pp. 413.

ONE of the most famous names in the present volume is that of Percy Bysshe Shelley, who was born near Horsham in 1792, and was drowned in the Mediterranean off Leghorn in 1822. The memoir of him is by Dr. Richard Garnett, who says that "opinion seems to be agreeing to recognise Shelley as the supreme lyrist, all of whose poems, whatever their outward form, should be viewed from the lyrical standpoint. ..... Despite his limitations, no modern poet, unless it be Wordsworth, has so deeply influenced English poetry." The article on Sir Philip Sidney (1554–1586) is by Mr. Sidney Lee, the editor. There is a short notice of a sixteenth-century printer, John Siberch, who probably came to England from Cologne and set up the first press at Cambridge in 1521. He printed nine or more books there in 1521 and 1522, after which year there was no printing at Cambridge till Thomas Thomas was appointed university printer in 1583. It was in the title-page of Siberch's Augustinus that Greek type was first used in England.

The biographies of medical men are thirty-three in number and include those of one president respectively of the Royal College of Physicians of London, the Royal College of Surgeons of England, and the Royal College of Physicians of Edinburgh. Sir Hans Sloane was born in County Down in 1660, studied medicine at Paris and Montpelier, and graduated as M.D. at the University of Orange in 1683. Coming to England in 1684, he was elected a Fellow of the Royal Society in 1685 and a Fellow of the College of Physicians in 1687. He then spent fifteen months in Jamaica, where he made a large natural history collection and on his return to London he settled in practice in Bloomsbury-square. He was secretary of the Royal Society from 1693 to 1712 and president from 1727 to 1741. In 1701 he graduated as M.D. at Oxford University, he was elected a Censor of the College of Physicians in 1705, 1709 and 1715, and was president from 1719 to 1735. In 1716 he was created a baronet, and in 1727 was appointed physician to George II. Sloane retired from medical practice in 1741, died in 1753, and was buried in Chelsea churchyard. Sloane-square, Sloane-street, and Hans-place are named after him. His collections were bequeathed to the nation. In 1754 Montague House was purchased for their reception and from this beginning the British Museum was developed. Francis Sibson was born in Cumberland in 1814, studied medicine in Edinburgh, and obtained the diploma of the Royal College of Surgeons there in 1831. From 1835 to 1848 he was resident surgeon at Nottingham General Hospital. In 1848 he graduated as M.B. and M.D. at the University of London and commenced practice as a physician in London. His house was in Brook-street, Grosvenor-square, and he there gave, in the winter of 1849–50, a course of demonstrations of visceral anatomy which was well attended. Sibson was appointed physician to St. Mary's Hospital when it was opened in 1851 and on the formation of the medical school he became one of the lecturers on the principles and practice of medicine. He was admitted to the Membership of the Royal College of Physicians of London in 1849; was elected Fellow in 1853 and Censor in 1874; he also delivered the Gulstonian, Croonian, and Lumleian lectures. He died in 1876. His numerous published papers were reprinted in four volumes in 1881. Frederick Slare or Slear was born in Northamptonshire, probably in 1647, and was admitted M.D. at Oxford University in 1680. He became a Fellow of the Royal College of Physicians of London in 1685, held the office of Censor in 1692, 1693, and 1708, and was a member of the council from 1716 till his death in 1727. He was elected a Fellow of the Royal Society in 1680. His published works and papers are mostly on chemical subjects. Frederick Carpenter Skey was born in Worcestershire in 1798, studied medicine in Edinburgh, in Paris, and at St. Bartholomew's Hospital, and took the qualification of M.R.C.S. Eng. in 1822. He was appointed demonstrator of anatomy at St. Bartholomew's about 1826, and assistant surgeon in 1827, but in 1831 he resigned his office of demonstrator and taught surgery in the Aldersgate-street Medical School for five years. He was elected a Fellow of the Royal Society in 1837, was appointed to lecture on anatomy in St. Bartholomew's Hospital in 1843, and became full surgeon in 1854. He held various offices in the Royal College of Surgeons of England, being appointed Hunterian Orator in 1850, professor of human anatomy and surgery in 1852 and president in 1863. In 1864 he was selected as the chairman at the Admiralty of the first Parliamentary Committee to inquire into the best mode of dealing with venereal disease in the army and navy. He received a Companionship of the Order of the Bath for his services in this capacity and the committee's report resulted in the passing of the Contagious Diseases Act. Skey died in 1872. He was the author of two treatises, one on Operative Surgery and the other on Hysteria. Sir Robert Sibbald, son of Sir David Sibbald, was born in Edinburgh in 1641 and graduated as M.D. in Leyden in 1661 and apparently also at Angers in 1662. Towards the end of 1662 he commenced practice in Edinburgh, formed a botanical garden there in 1667, and was chiefly instrumental in founding the Royal College of Physicians of Edinburgh, for which a charter was obtained in 1681, and of which he was elected president in 1684. In 1682 he became physician to Charles II. and in 1685 he was appointed by the town council the first professor of medicine in the university. Sibbald died in 1722. He was the author of numerous historical, topographical, and antiquarian treatises on Scotland. Samuel Foart Simmons was born at Sandwich, in Kent, in 1750 and studied medicine at Edinburgh and at Leyden, where he obtained the degree of M.D. in 1776. In 1778 he was admitted a Licentiate of the Royal College of Physicians of London and in 1779 he was elected a Fellow of the Royal Society. He was also physician to the Westminster General Dispensary, physician to St. Luke's Hospital, and editor of the *London Medical Journal*. His reputation as an authority in cases of insanity led to George III. being entrusted to his care in 1803. The King recovered from this mental attack in six months but became permanently insane in 1811, and Simmons, who had been appointed one of His Majesty's physicians extraordinary, was again in attendance. He was the author of several treatises and many articles in periodical publications. He died in 1813. Probably no medical name in this volume is more widely known than that of Sir James Young Simpson, who was born in Linlithgowshire in 1811, studied medicine at Edinburgh University, graduated there as M.D. in 1832, and was appointed professor of midwifery on Feb. 4th, 1840, when only in his twenty-eighth year. He was the first to utilise in obstetric practice the

American discovery that anæsthesia could be produced by means of ether, and in November, 1847, he had the good fortune to ascertain that chloroform possessed an analogous property. The biographers (Miss E. B. Simpson and Dr. D. Berry Hart) say that "to the science of obstetrics at the same time Simpson gave a new precision, while in the practical branches, notably in the use of the obstetric forceps and of the various methods of ovariotomy, his work was of he highest value." He received a baronetcy in 1866 and died in 1870. Among the more prominent of the other medical men included in the present volume may be mentioned Dr. David Skae (1814–1873), of the Edinburgh Royal Lunatic Asylum; Mr. Alfred Smee (1818–1877), surgeon to the Bank of England, chemist, and inventor of the electric cell which bears his name; and Dr. William Smellie (1697–1763), the obstetrician. The account of Mr. Septimus Sibley, of the Middlesex Hospital, contains at least two conspicuous inaccuracies and is unduly meagre.

Medical Diagnosis. By J. J. GRAHAM BROWN, M.D. Edin. Fourth edition. Edinburgh: William F. Clay. Price 9*s*.

THE appearance of the fourth edition of this book has, we fear, not come at a very opportune time, since the last few months have produced other works upon similar lines which may prove serious rivals. Every medical school must follow what are practically the same methods of clinical examination, but each teacher will introduce into those methods something of his own personality, and it is only natural that those who follow his instruction should become prepossessed in favour of any little individualities in a method of investigation to which they have become accustomed. For this reason we have no doubt that the present work will find a large circle of admirers in Edinburgh.

In his preface to the present edition the author tells us that it has been thoroughly revised and in great measure rewritten, while the chapters dealing with the Examination of Gastric Contents, the Examination of the Blood and of the Urine, also those treating of the Nervous System, have in particular been recast and considerably extended. On turning to the chapter dealing with Gastric Contents we find that the information given is quite up to date, but when we compare it with the corresponding sections in works which we have recently had before us we think that the modes of expression are not so clear as they might be. In the chapter upon the Examination of the Blood we find that some mention is made of all that is important in a work of this character, and were pleased to notice that a description is given of the serum diagnosis of typhoid fever. A short and clear description, however, in each case of the manner of preparing a given specimen for examination by the microscope or by reagents would have greatly added to the practical value of the book. Many of the examinations referred to are of an extremely delicate nature and any failure to produce the exact conditions necessary for examination would entirely alter the result.

LIBRARY TABLE.

John Armstrong: the Story of a Life. By MAJOR GREENWOOD, M.D. Brux., LL.B. Lond. London: Digby, Long, and Co. 1898. Price 6*s*.—This is a well-told tale of sustained interest throughout, having for its *motif* the not uncommon tragedy of a life-long retribution for a crime due to youthful passion. We do not intend to divulge the manner in which the plot is worked out, and it may suffice to say that John Armstrong appears before the reader first as house surgeon to a provincial hospital and that when his career is prematurely closed he had attained the summit of his ambition and had come to occupy foremost position as a surgeon. There are several dramatic episodes in the tale, but we must confess that the character of the hero is unattractive. His ambition is only surpassed by his selfishness, and few readers will regret his failure to win the libel action (owing to the disagreement of the jury) that he brought against one of his colleagues at St. Barnabas Hospital. Not that the libel could be justified or its mode of propagation approved, but Armstrong seems to have been guided throughout by a spirit of vindictiveness and a belief in his own infallibility. Many will find in this libel episode a most instructive exposition of the two sides of a question that is nowadays decidedly prominent. Dr. Major Greenwood has drawn his characters skilfully and in a life-like manner, the contrast between the "hero" and his friend the "Rev. James Paget," who is a model of uprightness and self-abnegation, being very vivid. We are glad to welcome Dr. Major Greenwood in his new *rôle* and to congratulate him on joining the ranks of the novel writers amongst the members of his profession.

The Cyclist's Pocket-book. London: Messrs. Archibald Constable and Co. 1898. Cloth, 1*s*.; leather, 1*s*. 6*d*.—All cyclists will appreciate this little pocket-book, which is handy in size and contains a mass of useful and even necessary information for the rider who would exact a maximum amount of pleasure from his "mount." The cyclist's almanack with space for entering distances, &c., will, when filled up, form an interesting and permanent record of the year's "wheeling."

The South African Gold Fields.—The Castle Mail Packet Company, Limited, have issued a useful little handbook dealing with the past, present, and future of the South African gold fields, their methods of working, labour, wages, cost of living, and means of access. The map which accompanies the book is a good one and there are several useful tables.

A Manual and Dictionary of the Flowering Plants and Ferns. By J. C. WILLIS, M.A. Two vols. London: C. J. Clay and Sons and H. K. Lewis. 1897. Price 10*s*. 6*d*.—The possession of these two little volumes will enable anyone who wishes to commence the study of botany to do so in a systematic and useful manner. The broad principles of the subject are clearly explained so that many of the difficulties which the beginner usually experiences are smoothed away and the student who follows out the methods for study which are here suggested should rapidly find himself making very definite progress. At the beginning of the first volume there is a short account of the general arrangements of some of the chief botanical gardens of this country and a perusal of this will be found an aid to methodical work and will give a general knowledge as to the whereabouts of the various plants. The first volume gives a great deal of general information about plants upon those points which do not require the use of a microscope, for the author thinks that the study of the external features of plants is in danger of being considered secondary to that of the internal features. There are chapters on Morphology, Natural History, Classification, Geographical Distribution, and the Economic Uses of the Phanerogams and Ferns. A large proportion of the space is devoted to the chapter on Morphology, and like the other chapters it is written in a clear and simple style which is at the same time both interesting and instructive and provides a good groundwork upon which further knowledge may be easily built. The second volume consists of a dictionary of the flowering plants and ferns and contains a very great amount of information. The two volumes used in conjunction with each other form a very good combination of practical and theoretical work.

The Occurrence of Optic Nerve Atrophy in General Disease. Being a Report of the Chairman of the Committee appointed by the Section on Ophthalmology of the American Medical Association to report upon Optic Nerve Atrophy of Obscure Origin. By H. V. WÜRDEMANN, M.D. Chicago: American Medical Association Press. 1896 Pp. 7.—This is only a brief preliminary statement to another article in which about 100 case histories will be reported. The groups given in this communication are those occurring in diseases of the digestive organs, diseases of the sexual organs, of the respiratory, cutaneous, circulatory and urinary organs; in constitutional and infectious diseases; congenital optic nerve atrophy; and, lastly, a group comprised under the head of "Miscellaneous" including exposure to cold and sunstroke. Dr. Würdemann concludes that atrophy of the optic nerve occurs in general diseases usually as a result of direct irritation from their toxins, causing inflammation with resultant interstitial changes or through necrobiotic changes in the blood-vessels affecting the nutrition of the nerve and retina. He admits, however, that well-pronounced atrophy is sometimes observed where neither in the history nor by examination can any clue be found to explain its occurrence.

A Comparison of the Value of Local Medicinal Measures in the Treatment of Granular Conjunctivitis (Trachoma). By H. V. WÜRDEMANN, M.D. Chicago: American Medical Association Press. 1898 Pp. 11. Also, *A Further Report on Holocain as a Local Anæsthetic in Ophthalmic Work.* By H. V. WÜRDEMANN, M.D., and NELSON M. BLACK, M.D. Reprint from the *Ophthalmic Record*, January, 1898. Pp. 3.—In the first of the above pamphlets Dr. Würdemann gives a short account of the pathology of the disease and then arranges the local treatment under the headings of detergents, antiseptics, reduction of acute inflammation, stimulation of nutrition, mechanical or surgical removal of the products of inflammation of the follicles, hyperplastic tissue, &c., relief of asthenopic symptoms, and finally relief of sequelæ. The various remedies that are or have been employed for the relief of trachoma are here succinctly and usefully given. In the second pamphlet the authors recommend holocain as being in many respects superior to cocain in its action.

A Degree for British Practitioners. By CHARLES REINHARDT, M.D. Brux. Published by the author, South Stoke, near Reading. Price 2*s* 6*d*.—This is a very clear and succinct account of the examination for the degree of M.D. of the University of Brussels. It will be found very useful to those who go in for this degree and undoubtedly the examination is a good one in most points. But we should rather doubt the wisdom of the system by which, according to Dr. Reinhardt, a candidate can take up the whole of his allotted time, some fifteen minutes, in wordy disquisitions on the nature, pathology, and symptoms of a disease. Dr. Reinhardt says on page 17: "When once embarked on an answer after this fashion it is impossible for an examiner to interfere." Surely this cannot really be the case. Some of the questions set seem a little too comprehensive—e.g., "What germs do you find in the sweepings from a hospital floor?"

Verses and Ballads. By THOMAS EDWARD AMYOT, F.R.C.S., of Diss. Norwich: Agas H. Goose 1897.—This book, written by a recently deceased Norfolk practitioner, is a collection of verses of singularly unequal merit. Some of the pieces are very good and some of them, to put it mildly, are not. Mr. Amyot has modeled a good many of his "serious and religious" pieces upon Herbert, Vaughan, and Quarles and the "Noonday Hymn" is worthy of Ken. We cannot give so much praise to the translations of the Psalms.

JOURNALS AND REVIEWS.

The Ophthalmic Record. Edited by CASEY A. WOOD, M.D. Chicago, and Others. New Series, Vol. VII. Subscription price 14*s*. Parts 1 and 2. January and February, 1898 The Ophthalmic Record Office, Suite 3, The High Building, Chicago, U.S.A.—Amongst the articles of interest in the two numbers of this excellent journal are the following: 1. A Case of Blood-vessel Formation in the Vitreous, with a chromo-lithograph, by Dr. G. Schweinitz. 2. Some Points in Retinoscopy, by Dr. Helen Murphy. 3 Three Facts and Two Theories as to the Law of Direction, by Dr. G. C. Savage. The facts adduced unite in destroying the theory that all lines of direction are axial rays prolonged and that these lines all cross at the nodal point in the posterior part of the lens. On the other hand, the facts demonstrate that "all lines of direction are radii of retinal curvature prolonged." 4. Removal of the Clear Crystalline Lens for High Myopia, by Dr. Edward Jackson. Twenty-two original articles are contained in these two numbers, several of which are illustrated, besides reports of societies.

The *Middlesex Hospital Journal.*—The February number of this journal contains a very interesting article on the Indian Medical Service by Surgeon-General C. R. Francis. It is eminently practical and lays stress upon a point which some people are too prone to forget—namely, that the average dweller in India is not merely a "nigger," that he has his likes and dislikes and prejudices, and that these ought to be respected. Another paper with some useful hints is the one on Pertussis, by Mr. C. Braine-Hartnell.

The *Girl's Own Paper* for March contains the first instalment of what promises to be an interesting and instructive series of articles on the feeding and housing of the poor. The present article deals with Lady Ashburton's praiseworthy work among the London dock labourers.

Analytical Records
FROM
THE LANCET LABORATORY.

(1) PEPSENCIA; (2) PANOPEPTON; AND (3) PEPTOGENIC MILK POWDER.

(FAIRCHILD BROTHERS AND FOSTER, NEW YORK. LONDON: BURROUGHS, WELLCOME, AND CO., SNOW HILL-BUILDINGS, E.C.)

PEPSENCIA is quite a palatable pepsin fluid extract which contains the physiologically active principles of the gastric glands. That the activity of these digestive secretions is preserved unimpaired is evident from the complete solvent action which, as our experiments have shown, it exerts over coagulated albumin. It rapidly converts albumin into peptone. The preparation is free from the nauseous taste and smell which frequently accompany preparations of the digestive ferments. Pepsencia is quite clear and free from deposit. It has recently been observed that when the iodides are given in conjunction with pepsencia the salt appears to be well borne while the therapeutic effect is satisfactory. It is suggested that as much as fifty grains of potassium iodide may be given in half a tumblerful of milk to which one or two teaspoonfuls of pepsencia (Fairchild) have been added. The glass is then filled with aerated water and taken while effervescing. Panopepton is one of those useful, partially digested preparations which may be used with undoubted advantage as nutrients in the dietary of the sick. It is a slightly alcoholic solution containing the peptones of cooked beef and the digested products of bread. From the results of our analysis there is

little question as to its sustaining properties. Alone, it contains the elements of a complete food, but it may be employed as an excellent adjuvant to milk or other food. The peptogenic milk powder aims at providing a means of easily preparing milk of the composition and character of human milk from cow's milk. An analysis of the milk so prepared shows that this is one of the simplest and most reliable means of preparing milk in accordance with the requirements of infants. The powder is composed largely of milk sugar but contains also the essential ferment for peptonising. A certain measure of the powder is added to half a pint of cold fresh cow's milk previously diluted with half a pint of cold water and to which also four tablespoonfuls of cream have been added. The mixture is then gradually raised to the boiling point. One of the most important results effected is that of the action of the ferment on the casein, so that the modified product conforms more to the character and nature of the casein of human milk. In this condition it is well borne by the infant and does not form into big indigestible clots.

CASCARA HAWLEY.

(EVANS, LESCHER AND WEBB, 60, BARTHOLOMEW-CLOSE, E.C.)

The extract of cascara sagrada is admitted to be a very useful aperient and cathartic. It has the advantage, too, of being tonic and stomachic. The disadvantages, however, attending its administration are its bitter nauseous flavour and its tendency to gripe owing to the presence of certain waxy constituents. The former drawback is easily overcome by administering the fluid extract in the form of capsules such as the above. The latter drawback may be removed by so modifying the preparation of the extract as to eliminate the griping principles. The above capsules and their contents conform to both these desiderata.

PURE GRANULATED CANE SUGAR.

(THE WESTBURN SUGAR REFINERIES, LIMITED, BERRY-YARDS REFINERY, GREENOCK.)

There are few, we imagine, who would not prefer cane sugar to beet sugar; the latter is liable to manipulation, especially in regard to artificial colouring, while cane sugar bulk for bulk is sweeter than beet sugar and its sweetness is superior. Chemically cane sugar and beet sugar are the same. We have examined the specimen mentioned above and find that it is correctly described as pure granulated cane sugar. It yields absolutely no mineral or other foreign matter and is in fact sugar and nothing but sugar and that of the far preferable variety. We have also examined a specimen of golden syrup made from the sugar cane which shows a similarly pure composition. It is remarkably clear and of that peculiar, sweet taste characteristic of highly refined molasses.

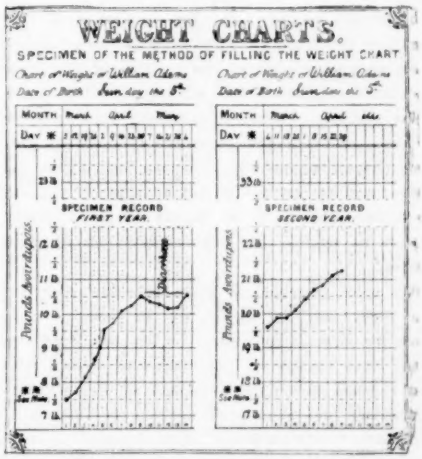
New Inventions.

TWO CLINICAL CHARTS.

THE first of the accompanying illustrations shows a very simple chart in the form of a calendar which may be called a "Medical Recording Calendar." It is designed principally for use during the treatment of menstrual irregularities. The record here given shows a case of regular menstruation interrupted by pregnancy which terminates in incomplete abortion causing menorrhagia, curetting cures the condition, and normal menstruation is re-established. The history of a year is here seen at a glance. The chart is equally useful in treating epilepsy, nocturnal incontinence, ague, or any periodic symptom. It also serves to record weekly weighings or the passage of bougies, &c. The patient's part is reduced to making a cross on particular days; a coloured pencil is best for this purpose. The second chart is for recording weekly weighings in infancy. Such a weight chart is of great use and interest in the first two years of life. It is an invaluable guide in questions of food and general hygiene. The weight curve is peculiarly sensitive to any

FIG. 1.

FIG 2.


WEIGHT CHARTS.
SPECIMEN OF THE METHOD OF FILLING THE WEIGHT CHART
SPECIMEN RECORD FIRST YEAR.
SPECIMEN RECORD SECOND YEAR.
Pounds Avoirdupois.

slight departure from health and has been known to foreshadow the outbreak of measles by a depression during the incubation period. The chart is particularly useful for patients suffering from malnutrition due to errors of diet. Both charts can be obtained from Messrs. Reynolds and Branson, Leeds.

JOHN B. HELLIER, M.D. Lond.,
Lecturer on Diseases of Women and Children, Yorkshire College; Surgeon to the Hospital for Women and Children, Leeds.

A NEW ASEPTIC CABINET.

MESSRS. ARNOLD AND SONS, of West Smithfield, inform us that they have constructed a cabinet for the storing of surgical appliances at a price that will place it within the reach of every general practitioner. It is made of iron enamelled white, with ¼-in. polished plate glass top, back, sides, and door, with two plate glass shelves with polished edges and is manufactured in two sizes—18 × 15 × 8 in., 35*s.*; and 24 × 18 × 11 in., 55*s.* The cabinet should prove useful to many institutions and practitioners.

THE LANCET.

LONDON: SATURDAY, MARCH 5, 1898.

THE General Medical Council may be considered as the great mediating body between the State or the public on the one hand and the medical profession on the other, and there is no period of the year at which it has the opportunity of showing itself to greater advantage than at a time like the present when Parliament is beginning work and when the Government is looking to the General Medical Council for direction in regard to various questions in which the public, as well as the profession, are interested. It is unfortunate that the PRESIDENT of the General Medical Council is physically unable to take an active part in making arrangements for the settlement of these questions. His interest in them is unabated, and all that he can do in the present condition of his health he does. But this implies great limitations. Meantime Sir WILLIAM TURNER is *in loco præsidentis*, and he shows a knowledge of the business of the Council and a desire to promote its efficiency which leave little to be desired. Various committees met last week, as we are informed—the Executive Committee, the Penal Cases Committee, and the Midwives Registration Bill Committee; and our readers do not need to be told that there are various matters of an urgent character which would be sure to engage the anxious attention of these committees.

The most pressing of these remains over from the year 1896 and is likely so to remain unless the Executive Committee presses for its settlement—we refer to the loose system of registration of deaths which has been exposed in various ways and at divers times in the proceedings and reports of the General Medical Council. Herbalists, "safe medicine" curers, midwives, unqualified assistants—in fact, almost anybody who likes—may write a statement of the cause of death which the registrar of deaths is at liberty to accept at his own discretion, and on the strength of such statements inquests are evaded, insurances paid, and the burial of the deceased secured. The present state of the law on this subject is quite indefensible and almost vitiates the system of registration of deaths. Though the REGISTRAR-GENERAL will not admit that his subordinates are acting illegally or improperly in registering deaths on such a loose and dangerous system, there is no reason to think that either he has, or the executives of the Government have, any insuperable objection to such a change of the law as is required. In these circumstances the Council or its Executive Committee will be at fault if very serious representations are not made to the Government on the subject without delay. Sir WILLIAM TURNER himself has taken great interest in pressing the existence of this great evil on the attention of the Government. This is the very kind of question in regard to which the Council can do much good on the one hand and can on the other hand by negligence fail very much in its duty. It is strange that of all forms of registration that of death should be chosen for laxity of treatment, and it will be largely the fault of the General Medical Council if this laxity is much longer permitted.

The Midwives Registration Bill now before Parliament—which Bill is identical with that of last year—has, it is understood, been again referred by the Privy Council to the General Medical Council. The Midwives Registration Bill Committee of the General Medical Council cannot report to the Privy Council on its own responsibility; it must submit its report to the judgment of the whole General Medical Council. The second reading of the Bill is down for May 11th and the Council does not meet in the ordinary course till the end of May. This is somewhat awkward but it will doubtless be possible for the PRESIDENT or Sir WILLIAM TURNER to intimate to the Government the arrangements for the meeting of the General Medical Council and to promise in the early days of June the maturest judgment of the Council on the merits of this Bill as judged by its fitness to remove the scandal of the high mortality of lying-in women. The General Medical Council has grave responsibilities in regard to this Bill and doubtless its Committee will see that its report is so framed as to favour the discussion of the Bill with the least loss of time.

We have not exhausted the subjects on which the General Medical Council has to mediate as it were between the profession and the public. The Council at its last meeting accepted the report of its Penal Cases Committee as to the advisability of certain prosecutions under the Medical Acts which are calculated to test the real value of these Acts as a protection to the public in the first place and to the profession in the second. In spite of the ill-success which has attended the first move of the Council in this direction—we refer to the case of W. M. COLLINS (see page 684)—we trust that the Penal Committee will continue its labours.

THE draft Local Government (Ireland) Bill, which was laid before Parliament on Feb. 21st, provides for the establishment of County Councils and defines their powers and claims for certain contributions out of the Imperial exchequer. But incidentally it provides also for very extensive and necessary reforms in medical and sanitary matters which are quite as sweeping as those in other directions. Those intimately acquainted with London workhouses know that they contain an undue proportion of Irish inmates, but, unless they have visited Ireland, they can have but little idea of the horrors of an Irish workhouse. The new Bill will, we hope, do a good deal to abate some of the abuses in these institutions. The lunatics of all classes will be entirely transferred from the custody of the guardians to the lunatic asylums which in future will be under the management of the new County Councils. Hitherto the asylums have been under the management of a Board of Control, these boards and the executive officers being appointed by the LORD LIEUTENANT. In future the County Councils will appoint the

medical superintendents, but both their appointment and dismissal will still be subject to the concurrence of the LORD LIEUTENANT. Adequate provision for persons now in office is made, and the right of retiring with a pension is provided. As regards the assistant medical superintendents now in office who have been waiting for promotion as in a Government service—that is, under the LORD LIEUTENANT—it is objected by some that they will be disadvantageously affected, but we cannot agree with this. Indiscriminate promotion by seniority by no means always procures the best men. If the assistant medical officers are efficient they will doubtless still stand a very fair chance of promotion; and if they are not efficient it is certainly not for the good of the service that they should be advanced.

The Dispensary Committees are to be abolished; but whether the grave scandals which arose in this connexion will cease, remains to be seen, for their business is to be transferred to the boards of guardians. The most important and far-reaching changes, however, are to be found in Clause 42, which provides that one-half of the salaries of medical officers of workhouses and dispensaries, half the salary of one trained nurse in each workhouse, half the cost of medicines and medical appliances, half the salaries of medical officers, and finally, a substantial contribution towards the lunatic asylums—subject to the lunatics therein being properly maintained and cared for and the asylum kept in good order and condition—will be contributed out of the Imperial exchequer. This reform, it seems to us, is one which carries within it the greatest consequences and is of the highest importance in the interests of good administration, especially as regards the medical officers and the one trained nurse. Alas, only one nurse is referred to, but it follows, we hope, as a matter of course that the authority sharing the expense will see that the terms of the agreement are complied with—i.e., that the nurse is properly trained and really efficient and that the old system of pauper nursing will be done away with for ever. A large amount of time is spent in discussing whether this or that system is the better, but without efficient officers no system can succeed, and it is on the nurses and attendants in immediate relation with the patients and inmates that kindly treatment of the sick and the detection of malingering and fraud largely depend. This is especially the case in workhouses and infirmaries where the medical officer is non-resident and engaged in busy practice. In the interests of efficient and economical management we are glad to see this reform adopted and we would gladly see it extended to the provincial parts of England.

The duties of rural sanitary authorities have hitherto been discharged by the boards of guardians of the district. If the proposed Bill becomes law these duties will in future belong to the district councils. In the interests of sanitary reform we believe this to be a lamentable error. In nine cases out of ten the new district councils will consist of the same persons as the old boards of guardians—that is to say, of members who have not the most rudimentary knowledge of the sanitary needs of a community. It seems a matter for grave regret that sanitary affairs should not be delegated altogether to the new County Councils, which we may fairly hope will consist of a superior and more intelligent class. Consisting as Ireland does of large and sparsely-populated areas the need for numerous small sanitary districts does not exist to the same extent as in England, and the sanitary areas might well have been brought under the County Councils. The business as to cattle diseases is to be transferred from the boards of guardians to the County Councils; why not also the business as to the diseases of man and their prevention? We have referred only, and that very briefly, to those matters in which the profession is interested. The Bill, as a whole, delegates an immense amount of business and responsibility to popularly elected bodies. How far this will be a success in Ireland time alone will show. The Irish public have not always given evidence of reliability in this respect, but it is to be hoped that with the need will come the means of discharging the responsible duties which appertain to such bodies.

THE country has now been thoroughly informed of the Government scheme of proposed army reforms. Mr. BRODRICK'S lucid statement of the case was both frank and full and he may be fairly congratulated on the ability he displayed in dealing with a most difficult subject and on the favourable impression he made on the House of Commons. Without attempting to follow all the points in the UNDER-SECRETARY FOR WAR'S statement we may briefly summarise some of them. There is a proposed accession to the strength of the army of 25,000 over the number in 1896–97—the greatest addition to the British army ever asked for in time of peace; the daily pay of the soldier is to be increased and the amount of the present deferred pay decreased; every effort will be made to teach various trades to soldiers whilst serving with the colours and to find them civil employments as reservists; an attempt is to be made to overcome the difficulties of the linked battalion arrangements and to induce men to return from the reserve to the colours so as to provide for our future small wars as well as those on a large scale proposals are suggested for making militia and volunteers available for general Imperial service; a scheme of general decentralisation is suggested, together with many other more or less important reforms.

This, it must be admitted, initiates if it does not complete a large and bold scheme. Its success obviously turns upon the assumption of two things. First, the enlistment soldiers in sufficient numbers and physically of the requisite quality; and secondly, the reliance to be placed upon the reserve that its members will be forthcoming when wanted and that they will be found efficient for military service in the field or otherwise. The arm of the service which most requires to be strengthened, perhaps, at the present time is the Royal Artillery and the officers and men of that corps also need the longest and most efficient training. We are also very glad to see that the War Office proposes to have military manœuvres on a large scale, for these test all branches of the service and bring to light any practical defects that require to be remedied. The benefit to the medical service in this respect is great. It stands to reason that to attain practical efficiency in war the organisation, administration, and practices adopted on field service require

to be frequently rehearsed. It has been said, and not unjustly, that on the existing system the army is made for the reserve rather than the reserve for the army. The tendency of the proposed War Office scheme is to redress this. No one can shut his eyes, however, to the fact that a short service system has accomplished much and that there is a great deal to be urged in its favour. What is wanted, however, is a more elastic system under which a larger number of physically matured and trained soldiers can be retained with the colours. The *Times* of Feb. 25th contained a communication from Cairo signed "Captain" on "Our Young Soldiers" which struck us as a very manly and obviously very honest vindication of their cheerfulness, bravery, and excellent qualities as well as a strong testimony to the good feeling and sympathy which binds officers and men together in every really good regiment. Everything should be done to encourage and strengthen this feeling of *esprit de corps*. The regiment is the home of the soldier and if the army is to be made a popular calling the regiment should be the unit of whose traditions the soldier is proud, in which he is happy, and which he leaves with regret. Whilst acknowledging to the full all that can be said in praise of our young soldiers it must nevertheless be borne in mind that on physiological grounds endurance of fatigue and "staying power" in the soldier require a matured physical development. It may, we think, be truthfully said that the scheme set forth in the late speech of the UNDER-SECRETARY FOR WAR is a great stride in the right direction. Whether it has gone far enough in all respects and whether the inducements held out to recruits will prove to be adequate remain to be seen when tested by experience. We venture to think that the limitations as to the shilling a day are a mistake; the proposal to deduct pay from young soldiers under nineteen years of age will not facilitate successful recruiting. It seems to us also a bad policy not to have better recruiting establishments than we possess at the present time. These establishments should occupy prominent and airy sites and not be hidden away in some dirty back street and they should have more attractive exteriors and be provided with good interior accommodation and clean, inviting arrangements generally. However, on the whole we must congratulate Mr. BRODRICK and wish the Government scheme all success. It now remains for the War Office to declare its intentions in regard to the medical service of the army.

THE University of London Commission Bill, 1898, the provisions of which we print in another column, is practically a similar Bill to that introduced by the LORD PRESIDENT of the Council on July 20th of last year. We trust that the difference of dates in the introduction means that the Government intends to pass the Bill during the present session, as it now cannot plead a want of time if it does not push it through both Houses of Parliament. The main difference in the two Bills is that in 1897 the names of the Commissioners were inserted in the Bill, whereas in the later one they are omitted. This would seem to indicate that some change in the *personnel* of the Statutory Commission is contemplated. In 1897 the members proposed for the Commission were Lord DAVEY, the Bishop of LONDON, Lord LISTER, Sir WILLIAM ROBERTS, Sir OWEN ROBERTS, Professor JEBB, and Mr. E. H. BUSK (the chairman of the Convocation of the existing University). In all other respects except the date the wording of the two Bills is identical.

The Schedule, however, which contains the executive details, has two important additions, as will be seen by referring to page 668, where we have printed it in full. In Part I. are laid down for the Commissioners' guidance "*the provisions to which effect is to be given*" when framing statutes and regulations for the constitution of the future University and in Part II. we find this headline: "*The Matters for which Provision must be made.*" These include the adequate protection of all classes of students, whether external or internal, collegiate or non-collegiate; the recognition as teachers of the University of duly qualified teachers and lecturers giving instruction of a university type in public educational institutions within a radius of thirty miles; the inclusion of the matriculated pupils of such teachers as internal students; and the due representation on the Senate of the Academic Council of all subjects of study and all sections of teachers of the University. The composition of the Senate is slightly altered by the appointment of one member by the Council of the City and Guilds of London Institute and four by the Crown, whereas in the former Bill five were to be the number of the Crown representatives. The total number of the Senate is fifty-six—viz., the Chancellor and fifty-five other members. Whether the Duke of DEVONSHIRE intends to consider the claims of the Society of Apothecaries to representation we have no information, but the Society can certainly make out a good case for inclusion. The Senate is to form three standing committees: (1) the academic council for the internal students; (2) the council for external students; and (3) a standing board for the extension of university teaching. As medical students in London are all internal or collegiate students we are not so concerned as are the other faculties, especially those of arts and law, in the regulations for the examinations of external students; but their interests seem to us to be adequately safeguarded by the formation of a standing committee of twenty-eight members including the sixteen members appointed by Convocation. The conduct of the examinations is very fairly and adequately laid down in the following paragraphs:—

"Unless the Senate either generally or by regulation as to a particular case otherwise determine separate examinations shall be held for internal and external students respectively and each certificate and diploma shall state whether the candidate has passed as an internal or as an external student, but the degrees conferred shall represent the same standard of knowledge and attainments. Internal students shall be admissible to the examinations for external students if they prefer to graduate on those terms.

"In all examinations the Senate shall if practicable appoint in each subject at least one examiner who is not a teacher of the University."

The Commissioners are to frame the statutes and regulations by the end of 1899 and then the Senate will have

power to make statutes and regulations for altering or supplementing those made by the Commissioners, but these must be communicated to Convocation the opinion of which body will have to be taken into consideration by the Senate. All statutes and regulations must be laid before the Houses of Parliament for forty days and will not be valid until they have been approved by HER MAJESTY THE QUEEN in Council. Not only may either House of Parliament present an address praying the QUEEN to withhold her assent from any statute or regulation or any part thereof, but the Senate or Convocation of the University of London or any other person or body directly affected may within three months from publication petition HER MAJESTY in Council to withhold her approval and such petition may be referred to a committee of the Privy Council for special report. We fail to see what further safeguards can be asked for by the opponents of the scheme which appears to us as definite, and at the same time as elastic, as could be devised for a dual university under one Senate.

Annotations.

"Ne quid nimis."

THE EXPENDITURE OF THE METROPOLITAN ASYLUMS BOARD.

THE wholesale admission of all and sundry into isolation hospitals without any of those wholesome checks which the law was supposed to have provided in giving the power of making regulations to the Local Government Board goes on at an ever-increasing rate. Fifty per cent. of the infectious cases notified in London are received into the hospitals. Thus in the fortnight ending on Thursday, Feb. 24th, there were 1443 notifications of infectious cases and the Board admitted in the same period 723 cases. The lucid and frank statement of Mr. A. C. Scovell, chairman of the Finance Committee, at the meeting of the managers on Saturday last enables the public to understand that such a system is a costly one. The expenditure proceeds by leaps and bounds and no serious remonstrance is raised against it. For the year ended at Michaelmas last the grand total expenditure was £665,400, made up thus: for imbeciles, £134,000; for boys on training ships, £18,200; and for the infectious sick, £328,000; general expenditure, including loans and general administration, £185,200. The total amount of loans raised by the managers to Oct. 2nd last was £2,912,986, of which the sum of £873,336 has been repaid. The assets are said to amount to £2,831,609, showing an excess over liabilities of £791,959. The borrowing process goes on merrily. The Local Government Board has given its consent to the Managers borrowing from the London County Council £500,000 for the year ending March 31st, 1899, and the sum of £100,000 ending Sept. 30th, 1899. The excess of expenditure in 1897 over that of 1896 was £40,270. The difference is accounted for chiefly by the Brook Hospital involving an additional expenditure of £33,000. The history of the discrepancy between the estimates and cost of this hospital almost exceed in interest that of the famous Works Committee of the London County Council. According to the *Times* report of Mr. White's speech moving the adoption of the Financial Committee's report the original estimate for the erection of the hospital was £194,810; the amount of the tenders ultimately accepted was £213,171 16*s.* 2*d.*, whilst the amount which the Managers were asked to pay in settlement of the contractor's final claims was £268,507 11*s.* 2*d.* Such an excess demands a very strict inquiry and the Board adjourned without disposing of the subject and in the middle of a debate on an amendment to refer the report back to the committee. We sincerely trust that the amendment will be passed and that we shall get to the truth in this matter.

THE MEDICAL DEFENCE UNION.

THE work accomplished by the Medical Defence Union during 1897, as summarised in the annual report of the council, has resulted in material benefits to a considerable number of the members and supplies a further proof, if indeed any further proof were needed, of the advantages to be obtained by combination. Referring to the numerous cases in which attacks have been made on members of the Union on various pretexts the council justly remark that if the individuals assailed had been unsupported by the Union serious personal expense, great anxiety, and much loss of time would have been incurred by them, but coöperation has worked wonders and a member having his case taken up by the council is relieved of most if not of all of the trouble connected with it. The amount of work undertaken by the council on behalf of the members may be inferred from the fact that upwards of 180 cases have been legally advised upon and conducted by the solicitor in the course of 1897. An outline of 100 of these cases is published in the annual report, the nature and results being given, but, of course, without the addition of any names. Prosecutions of irregular practitioners have been conducted both under Section 40 of the Medical Act and under the Apothecaries' Act. Dr. W. S. A. Griffith has been elected president in the place of Mr. Victor Horsley, who has rendered most valuable services to the Union, but who resigned last October on the occasion of his election as one of the Direct Representatives for England on the General Medical Council. The offices of the association are at Nos. 20 and 21, King William-street, Strand. The general secretary, to whom all communications should be addressed, is Dr. A. G. Bateman.

THE FELLOWSHIP OF THE ROYAL COLLEGE OF PHYSICIANS OF LONDON.

WE have been given to understand that there is a feeling of dissatisfaction amongst Members of the Royal College of Physicians of London with respect to the elections to the Fellowship which have been made of late years. According to the by-laws of the College the duty is imposed on the Fellows of nominating and electing annually from amongst the Members of more than four years' standing those who may be deemed worthy of the Fellowship. The duty is a responsible one, but a still greater responsibility rests upon the Council upon whom involves the selection from amongst the nominees of those whose names shall be submitted for election. Whether any better procedure could be devised it is difficult to say, but obviously from one reason or another it may happen that names are passed over without any intention of inflicting slight or injury. There are reasons why early promotion should fall to the lot of those who elect to spend the best years of their life in scientific work which if it lead to fame is less certain of leading to fortune; but there must always be a risk of overlooking the merits of others whose careers are less obtrusive but none the less honourable and worthy of recognition. The College has long passed out of that narrow exclusiveness which did it so much harm fifty years ago and has assumed a most important position as a licensing body, no fewer than 7632 Licentiates appearing on

the list of the present year. It has also enlarged its proportion of Fellows and we trust that it will exercise a generous spirit in still further expanding the list. At the present time there are 301 Fellows, of whom about one-third are provincial, and 470 Members, of whom one-half are provincial. It cannot, we think, be urged that London physicians are disproportionately represented amongst the Fellows of a London college. Yet there may still be present in some quarters the same feeling as was expressed by the late Dr. C. J. B. Williams, who, speaking of the early seventies, wrote in respect to elections to the Fellowship that "there were complaints of partiality and unfairness as to those who were elected, deserving seniors being passed over and juniors preferred if they happened to have friends among the Fellows."[1] Dr. Williams had gallantly but vainly attempted to reform the College thirty years before, and he tells us that in 1872-74 he frequently attempted to remove what he considered to be a defect in its constitution. His remedy was to promote to the Fellowship by seniority of standing, although he further suggested that junior Members might perhaps be admitted to the higher grade by examination. We should be sorry to see such a change as that, for ideally the method in vogue at present is better suited for the end in view. To make it free from any reproach or charge of injustice it should be incumbent upon every Fellow of the College to exercise his privilege of nomination with due regard to all the considerations which influence the bestowal of an honourable title.

CHILDREN'S SIGHT.

IN a paper read before the Society of Arts upon Feb. 23rd Mr. Brudenell Carter gave the results of his inquiries into the vision of a considerable number of children in the London board schools. The examination of such children is not, on various grounds, an easy one to undertake. To obtain perfectly satisfactory results the application of atropine or of some other cycloplegic drug is requisite, and this in view of the interference with school work and the wrath of litigious parents is unfortunately not practicable. Still, as Mr. Carter observes, approximate results can be obtained, and it is much to his credit that he is able to supply statistics of no less than 8125 children. Of these he found that only 3181, or 39·15 per cent., had normal vision with both eyes, the cases of normal vision with one eye and subnormal with the other constituting an insignificant minority, so that, roughly, of London school children between the ages of eight and thirteen years nearly 60 per cent. do not see as acutely as they ought to do. More careful examination of the refraction of the defective eyes made by himself and Mr. Hickman in 1448 cases showed that hypermetropia was present in 61 per cent. and myopia in 14·3 per cent. These figures are fairly in accordance with those given in recent authoritative works. Thus MM. Truc and Valude give as the result of the examination of 985 eyes of children between the ages of six and twelve years the number of emmetropic eyes at 31·66 per cent., of myopia at 11·68, and of hypermetropia at 56·66. It is questionable whether hypermetropia is to be regarded as a defect. The great majority of children are said to be born hypermetropic, and the seaman or dweller on plains requires throughout life good vision for distance. Flat eyes and the long sight associated with them only become a defect when they are applied to the avocations of civilised life. Nor within moderate limits is myopia a defect. A myopic eye is one that is better adapted for near than for distant vision, but that is all; and many myopic persons pass through life with no further inconvenience than that they are unable to define objects at a distance while they are readily perceived and recognised by others. It is only when these conditions of refraction are of high degree or when from some general condition moderate degrees of hypermetropia or myopia prove troublesome that assistance is required. To determine this, however, an examination is requisite which would as a rule only occupy a minute or two, but which would be sufficient to place the parents or teachers on their guard and to indicate the necessity for further skilled advice. Few people, Mr. Carter remarks, have any exact or useful knowledge as to what their children ought to be able to see, though they might be perfectly competent to say how high they might jump, how far they might walk, and what weight they could carry, and he adds that he would like to lay stress on the desirableness of giving a place to excellence of vision among the various physical qualifications which were habitually tested by competition and for which prizes were awarded. Whilst admitting that considerable assistance can be afforded to children with defective vision it must, we think, be conceded that much still remains to be done in the way of prevention. No small number of schools both public and private urgently require inspection both in regard to the amount of light admitted, the arrangements for ventilation in their schoolrooms, and the nature, quantity, and cooking of the food supplied.

[1] Memoirs of Life and Work, 1884, p. 402.

RECENT VIEWS ON DYSPEPSIA.

AN important monograph on the physiology and pathology of the gastric secretion by Dr. A. Verhaegen, of Louvain, forms the sixth number of *L'Œuvre Médico-Chirurgicale*. The writer's views are the result of his personal experience, which appears to be extensive, and of an exhaustive study of the French and German authorities, to whom almost all our recent knowledge based on the examination of the gastric contents removed by syphoning at different periods of digestion is due. Excepting nervous dyspepsia Dr. Verhaegen repudiates the view that dyspepsia is ever a merely functional disease; it always results from subacute or chronic gastritis. He recognises four forms—chronic simple gastritis, gastritis with hyperchlorhydria, gastritis with hypersecretion, and nervous dyspepsia. Chronic simple gastritis, usually called gastric catarrh, comprises most of the conditions vaguely designated flatulent, bilious, or atonic dyspepsia. If prolonged the catarrh terminates in atrophy of the glands and sclerosis of the connective tissue. Finally the muscular coat may become involved and disorganised. Examination of the gastric contents shows deficient acidity, delayed digestion, and abnormal fermentations. As to treatment, the meals should be small and there should be long intervals between them; four may be taken in the day in ordinary and three in the worst cases. Milk being a complete food and easy of digestion forms a suitable diet; four and a half pints daily are sufficient for a man at rest. Leube thus arranges foods in the decreasing order of their digestibility: broth, solution of meat of Leube and Rosenthal, peptones, milk, eggs raw or cooked a little, biscuit, calf's brain and sweetbread, poultry, finely hashed meat, beefsteak. Pork is condemned by all authorities. Cheese and vegetables are tolerated in only small quantities. Those vegetables which contain but few fibres of cellulose should be selected, such as carrots, cauliflowers, spinach, &c. For drinking nothing is better than water, but with it few patients are satisfied. Milk may be taken pure or with a little coffee, or effervescent mineral waters may be taken in moderate quantity. But absolute rules as to diet cannot be laid down; the personal experience and idiosyncrasies of each patient must be studied. Drugs have singularly lost their importance. Bitters such as condurango, calumba, quinine, or nux vomica may be given from a quarter

to half an hour before meals; they should be discontinued when the appetite has returned. Hydrochloric acid in dilute solution may be taken half an hour after meals. Pepsine is superfluous; the stomach secretes sufficient. Washing out the stomach with warm water every day, or every second or third day according to the case, is of the greatest service. Gastritiswith hyperchlorhydria is not what has been called "acid dyspepsia," which merely designates dyspeptic troubles of various origins having the symptoms of pyrosis in common. Pyrosis has no signification from the point of view of hydrochloric acid secretion; it can be produced by the regurgitation of feebly acid chyme. Most of the cases which have been called gastralgia were really examples of gastritis with hyperchlorhydria. Examination of the gastric contents after a test meal shows normal digestion and usually increased acidity. But in some cases the acidity is not above the mean and even is below it. The symptoms, for this and other reasons, must be due not simply to acidity but to intolerance of the mucous membrane even to ordinary gastric juice, in consequence of morbid changes. The principal symptom is pain, which may be severe. It radiates from the epigastrium through the last intercostal spaces. It begins two, three, or four hours after a meal and lasts from a few minutes to several hours. It is relieved temporarily by the ingestion of food and still more by bicarbonate of soda. The stomach is sensitive to pressure in the pyloric region. The treatment consists of rest in bed with warm applications. The diet should be milk or eggs; after a time a small quantity of hashed meat and a little bread may be taken. Bicarbonate of soda should not be given in large quantities which irritate the stomach, but in small doses every half-hour or hour until the end of digestion. Gastritis with hypersecretion is, according to Dr. Verhaegen, only a later stage of the previous form in which secretion has ceased to be intermittent and has become constant. The stomach during fasting always contains a notable quantity of acid secretion. It is always dilated, sometimes enormously. Hayem, indeed, regards the hypersecretion as simply a symptom of pyloric stenosis. Washing out the stomach with warm water is the best means of moderating the glandular activity. Several grammes of bicarbonate of soda should be dissolved in the water in order to destroy the sarcinæ which are always present. The best time for washing out the stomach is before the evening meal; the pains which occur at night will thus be mitigated. In other respects the treatment is similar to that of the previous form. Starchy foods, which are but little or not at all digested, should be reduced and given only at the most favourable time—the meal which precedes or follows the washing out of the stomach. In the advanced forms gastro-enterostomy, which gives very good results, is indicated.

"ROMANCE UPON ROMANCE."

THE phrase is Thackeray's, who made it the title of one of his happiest efforts, and it may be revived if only to indicate the drama in real life in which George Sand and Alfred de Musset were protagonists, playing against each other through the intervention of the physician, Dr. Pietro Pagello, who died at Belluno last week a nonagenarian. Some forty years ago when poor de Musset, exhausted in mind and body—did he not inscribe on his bottle of absinthe "per me si va nella Città dolente"?—passed "under the daisy quilt," his old love, George Sand, published her "Elle et Lui," to put the world right as to the real cause of their separation at Venice in the winter of 1833–34. Mistress of a magic style which John Stuart Mill found to act on his nerves like champagne, the authoress of "Consuelo" had all but succeeded in making the deceased poet appear before the Parisian world the guilty party when his brother Paul's "Lui et Elle" turned the tables on her and proved that it was no infidelity of her rightful lover but the superior attractions of the young Venetian medical man called in to attend him that dissolved that "union of hearts." The controversy, so much to the taste of "the Lutetia of the ancients and the Laetitia of the moderns," took some time to die out, but had at last descended to the limbo of forgotten scandals when just a year ago it was discovered that the one survivor of the "triangular duel" was enjoying a green old age at Belluno and that if properly approached he could settle the rights and wrongs of the "vexata quæstio" for all time. So in great force the interviewer repaired from Paris to the quaint old Venetian town and found Pagello "robusto e vegeto" on his daily walk arm-in-arm with his son to the Piazza Campitella and the Caffè Manin, where he took his daily refection. There the "old man eloquent," in answer to courteous inquiries, steadily and circumstantially revealed all he knew of the romantic quarrel, described the "febbre cerebrale" under which he found the poet labouring, and alluded with all due delicacy to the lady's passion for himself—a "bel giovane" not long out of his teens. In fact, so impressed was he at the time with the brilliant Parisian pair, their gifts and graces, their "amantium iræ" doomed never to reach the "amoris integratio," that he kept a diary of his daily visits at their residence, and to this in a published form he referred his eager interviewers for full and final light on a theme more fit for Ovid than for a disciple of Celsus. That diary is now before the public, and if it reinforces Paul de Musset's version of the inconstancy that wrecked his brother's life it does so with a verisimilitude and manly self-abnegation that redounds to its author's credit, spared as he was to live down the "years of April blood" and in a tranquil professional autumn to put on record his unique experience, its "shadows" no less than its "lights."

A CORONER ON UNQUALIFIED PRACTITIONERS.

AN inquest was held at Bury by Mr. S. F. Butcher on Feb. 15th to inquire into the death of an infant named Fenwick. The mother of the child in her evidence stated that the baby had been attended by a man named Berry, whom, when she called him in, she believed to be a qualified man. After the child died she found that Berry was not qualified because she could not get a certificate. He used to come two or three times a week. Mr. W. J. France came once but refused a certificate. The coroner in summing up caused Berry to be brought before him and made the following remarks, which are so admirable that we quote them in full from the report of the inquest in the *Bury Times*:—

The coroner said he considered it essential that coroners should very carefully inquire into all deaths of children who have not been attended by a medical man. It was completely in the interest of the public that those who administered the practice of medicine should not only be by their knowledge and experience fully qualified, but that they should be under such regulations as the General Council of the medical body afforded so far as such things could be brought to bear. It was essential for the administration of justice that those who administered the practice of medicine should be qualified and properly regulated, and it was even more essential in the interests of the poorer classes of the community, for unless these medical men were actuated by an honourable spirit and at the same time subject to proper regulations he was afraid the poorer people were apt to suffer rather than receive benefit at their hands. He knew nothing personally about Mr. Berry as to whether he was an honourable man or otherwise, but he knew that he was an unqualified man. That being the case, the presumption was that he lacked opportunity or knowledge to enable him to properly qualify himself, and in addition he was not subject to the regulations of the General Medical Council. He (the coroner) therefore desired it to go forth that in every case of death where he found that Mr. Berry had been in

attendance he would feel it his duty to hold an inquest. Mr. Berry was unable to give a certificate of death, and if a medical man declined to attend a person who was being attended by Mr. Berry, unless in very extreme cases, he would say that that qualified medical man was doing his duty. He (the coroner) would feel it to be his bounden duty in all such cases to hold an inquest, and he made that announcement in order that all whom it might concern might take warning. If Mr. Berry possessed medical knowledge sufficient to enable him to practise, he hoped he would take steps to place himself under proper regulations. A verdict of death from natural causes was returned.

We have nothing but commendation for these words of the coroner, and they are all the more to be commended inasmuch as he is not a medical man.

TESTIMONIAL TO MR. HALL HAINS.

THE legal proceedings in which Mr. Hall Hains was recently involved are so well known to our readers that it is unnecessary to reiterate them, but it is with pleasure we note that Mr. Hall Hains's friends and patients have presented him with a congratulatory address and a purse of 178 guineas. The presentation was made on Wednesday, Feb. 23rd, by General Goldsworthy, M.P., at the Athenæum, Shepherd's Bush, and among those present were Mr. W. J. Bull, L.C.C., Mr. E. A. Goulding, M.P., L C C., Colonel Tytheridge, Mr. Revis, Mr. J. Watson Moyses, Mr. Joseph Smith, and Mr. Carre Smith.

ABORIGINAL GRATITUDE.

IN his efforts to cure his patients and maintain the honour of his profession nothing is more helpful to a medical man than the knowledge that his labours are appreciated, and spontaneous recognitions of his work atone for much disappointment, brighten the dull routine of duty, and stimulate to fresh endeavours. Though we are able to record frequent examples of the recognition of services rendered by medical men among civilised races it is but seldom that we can refer to an event like that reported by the *Fiji Colonist and Levuka Gazette* of Dec. 4th, 1897. Our antipodean contemporary reports a farewell entertainment or "*meke*" given by the natives of Levuka and district to their retiring medical officer, Mr. George Fox. Mr. and Mrs. Fox and a few friends were invited to the house of Ratu Vilemoni, the chief native, when "some score or more of the maiden beauties of the district, gaily dressed out in their most imposing *sulus* and wreaths of flowers and *Wa-Kalou*, presented themselves, when a series of *mekes* was performed, ranging from the soft slow cadences which would make such a delightful lullaby to the quick joyous tones which give one the impression that these children of nature are without a care in the world." Ratu Vilemoni then presented Mr. Fox with some mats, some valuable curios of old Fiji, and a dainty *Roi*. The *Fiji Colonist*, in concluding its report, observes: "The invitation was issued spontaneously and it is doubtful if such an honour has ever before been tendered any retiring medical man for the express purpose of signifying the natives' appreciation of his services among them. Commissioners, magistrates, and acting Rokos—yes, by the score, as to one in authority, but to one who has waited upon them and as a recognition of benefits received the occurrence is almost unique and reflects great credit on all who were concerned in providing it." Whatever the exact character of a "*meke*" the circumstances under which it was given are as creditable to the Fijian natives on the one hand as they are to Mr. Fox on the other. If untutored aborigines can recognise in such a tangible manner the services of the medical man whom Government provides for them, notwithstanding what our poet says of "benefits forgot," the time has not come to despair of the rest of mankind. And in spite of medical aid sweaters and the grudging parsimony which discharges all its obligations with the tardy payment of an oft-rendered account there will never be lacking some who will recognise unselfish performance of duty and lift from the jaded medical man the gloom which, but for them, would settle upon him and stifle some of the most generous impulses of the heart.

THE RECENT MAIDSTONE EPIDEMIC.

IT appears from the report of the half-yearly meeting of the Maidstone Water Company which was held on Feb. 24th, that the sum expended by the directors during the past six months in connexion with the late epidemic was over £1651. As this expense has been met out of the revenue account no dividend is to be declared on the ordinary share capital.

ST. WINIFRIDE'S WELL.

ROMANCE is evidently out of date in these days. The urban council of Holywell have decided to allow Mr. Atherton to abstract water from the Well of St. Winifride between midnight on Saturday and midnight on Sunday, the said water to be bottled for table purposes. Of course this decision has not been arrived at without a great deal of argument and the reports of the meetings of electors as given in the *County Herald* of Feb. 18th reveal an amount of imbecility which is almost inconceivable. It seems to us that the urban council have gone quite the wrong way to work. Without entering upon the *vexata quæstio* of whether the waters of the well possess healing powers or no the said council ought not to exploit the water of the well simply as a means of making money. They ought to consider themselves simply as the trustees of the well and the well itself should be looked upon somewhat in the light of the Monuments Historiques in France. The council should be charged with keeping the well in repair and preventing its pollution, while the expense should be met by a small fee being charged to those who visit the well.

ASSAULT ON THE LEADER OF THE TUSCAN SCHOOL.

FROM Florence a correspondent writes: "It has hitherto been the boast of civilised countries that whatever other member of the community may be the object of personal violence the medical man may go wherever and whenever his duty calls him without fear of molestation. Proof to the contrary, however, has just been afforded by the Tuscan capital, where the leader of its medical school, Dr. Pietro Grocco, Professor of Clinical Medicine in the Istituto di Studi Superiori and Director of the Balneary establishment at Monte Catini, was on Feb. 17th attacked and injured in his own residence by two brothers from motives unjustifiably and brutally vindictive. The circumstances were these. In the medical wards of our great hospital, the Santa Maria Nuova, in Professor Grocco's clinique, one Cecchi died from tuberculosis and, in accordance with the rule that all patients in the hospital who succumb to their malady shall be subjected to post-mortem examination if deemed necessary, the body was submitted to the usual necropsy. His two brothers, Giovanni and Luigi Cecchi, on hearing of his death repaired to the hospital to see the body and on being shown it with the traces of its having recently been opened still manifest they professed surprise and indignation and used the most outrageous language towards the 'preparatore' and his assistant, just stopping short of actual assault. They then proceeded to the residence of Professor Grocco in the Piazza Santa Maria Maggiore and announcing themselves as patients were admitted to his consulting-room. They at once fell upon him and before he succeeded in beating them off with the aid of sundry domestics

they had wounded him in the face, producing a rather painful contusion under the right eye. By this time Professor Grocco, quite unaware of the motive of the assault, had been informed of the names and alleged 'grievance' of its authors, and as they were being led away by the Municipal Guards he procured their release—not, however, before one of the brothers (Luigi) had been recognised as an old offender, having, in fact, been lately released from prison. They were afterwards put under arrest by the Public Prosecutor, at whose instance the preliminary steps were taken for their trial. Meanwhile Professor Grocco, in answer to sympathetic inquiries, is announced as having quite recovered from the agitation and the physical maltreatment he underwent and was able within a few hours to start first for Prato and thereafter for Monte Carlo, to both of which places he had been called in consultation. The incident has created a profound impression throughout Italy, not only on account of the preeminently valuable life which was so violently assailed, but as an object-lesson in the 'mediævalism' which still adheres to certain classes of the people. The same prejudice, the same animosity, against the healing art and its representatives that inspired the brothers Cecchi explains the scenes from time to time put on record by THE LANCET when during a cholera epidemic the proletariat rise in fury against the physicians who they think are poisoning them or proceed to stone the public vaccinators when performing their duty as prescribed by the State.

INFLAMMABLE HAIR COMBS: A GRAVE DANGER

THE danger of employing as articles of dress substitutes for tortoiseshell and ivory such as celluloid and the allied substances, is well known and, in fact, was pointed out by us some years ago.[1] We had hoped that the public through the channel of the press would by this time have been so acquainted with the highly and easily inflammable nature of these substitutes as to have led to the exercise of all care. But it is not so. On the contrary there has been placed upon the market a comparatively new design of a hair-fastening comb which, we admit, affords advantages both from the useful and artistic point of view but in regard to the dangerous properties of which we feel in duty bound to issue a not uncertain note of warning. It appears to be a very popular article and we are convinced that it exposes the wearer to very real dangers. The evidence both of experience and of experiments prompts us to issue a very serious word of caution. The hair-fastener to which we allude consists of two combs fastened by a hinge at the top so that the combs close like the legs of a compass, the teeth overlapping and serving to secure the hair with a too sure certainty which may lead to the most disastrous results. Should the comb of the fastener be by any means fired, and there are many ways in which in practice this might easily occur, it would be practically impossible to withdraw the comb from the hair. In one instance within our own knowledge combustion of the comb, whilst fastened in the hair, was caused by the mere application of hot curling tongs. We have since confirmed the extreme probability of an occurrence of this most dangerous kind. In experimenting with one of these combs we found that though it may be readily ignited when detached from the hair yet the combustion does not appear to proceed far. But when the comb is placed in position in the hair the combustion, aided doubtless by the non-conducting property of the hair, proceeds in a most alarming fashion. The combustion takes place silently, but dense and very copious fumes are evolved which are highly inflammable and which, like coal gas or, even worse, like the vapours of ether, will in contact with a naked flame ignite, as we have found, some distance away from the seat of evolution. In the case to which we refer above severe burns were produced and the hair was practically destroyed. Our experiments were tried by placing the comb in position in a wig and the results were absolutely convincing as to the possibility of the most serious consequences ensuing to the wearers of these hair combs. We found that a curling iron heated to the temperature usually employed for the curling of the hair was sufficient in contact with the comb to start the evolution of dense fumes. Assuming these to be free from injurious consequences, which is not probable, the proximity of a naked light does the rest. We earnestly trust that those using this otherwise doubtless useful article will remember the extremely dangerous property of celluloid and will use the greatest care. We are strongly of opinion that such inflammable substances as celluloid are utterly unsuitable either for ornamental or useful purposes on the person, since they expose the wearer to such serious risks. Celluloid may be easily recognised by its developing a smell of camphor on being carefully warmed or rubbed, or by noting the extreme inflammability of a portion scraped off the article. We plead in the interests of public safety for a return to the employment of the good old-fashioned substances, such as horn or other non-inflammable materials, in the manufacture of these articles intended for the toilette. If celluloid must be used for these hair combs and hair curlers the manufacturers should be compelled to stamp plainly on every article the words "Highly Inflammable."

[1] THE LANCET, March 26th 1892, p. 708.

INFECTIOUS HÆMATEMESIS.

IN an annotation in THE LANCET of Nov. 6th, 1897, we called attention to the bacteriological examination of the blood during life—a comparatively new method of investigation which seems destined to be of great service in the future. Its advantages over bacteriological examinations in the cadaver—on which for internal diseases we have had in the past to rely almost entirely—must be manifest. In THE LANCET of Jan. 15th, 1898, we announced that MM. Triboulet and Coyon had found constantly in the blood of patients suffering from acute rheumatism a diplococcus which seems to be much more probably the long-sought cause of the disease than the various organisms found after death. The pathogenesis of gastric ulcer is still an obscure subject; microbes are supposed, but only hypothetically, to be the cause in some cases. In the following case, published in the *Journal des Praticiens* of Feb. 3rd, 1898, by M. Giraudeau, bacteriological examination of the blood gave evidence in support of this view and also threw much light on the case. A woman, aged forty-three years, who had never suffered from any gastric symptoms, was suddenly seized with hæmatemesis amounting to from half to three-quarters of a litre, which was followed a few hours later by copious melæna. The same events occurred two days afterwards. On the next day she was admitted to hospital so enfeebled that artificial serum had to be injected subcutaneously. A third attack of hæmatemesis and melæna took place on the seventh day. Before the first hæmorrhage occurred the patient had rigors and when admitted her temperature was 104° F.; on the next day it was 104·7° in the morning and 105° in the evening; on the following days it showed great oscillations, reaching or passing 104° in the evening and falling to 102° and later to 100·4° in the morning. There was no tenderness over the stomach; the abdomen was tympanitic. The symptoms of the patient did not correspond, therefore, to any well-known type of disease. Evidently there was an infectious process. But what? The serum test showed that it was not a case of ambulatory typhoid

fever with gastric ulceration. A mitral regurgitant murmur was then heard; there was evidently infectious endocarditis. The staphylococcus aureus was found in the blood and a few days afterwards the staphylococcus citreus. Under quinine the patient improved, the temperature oscillating between 100·4° and 102·2°, but on the twenty-fifth day it rose to 103·2° and there was phlebitis of the left crural vein. The patient recovered, but the cardiac murmur persisted. The case was, therefore, one of staphylococcic septicæmia with gastric, cardiac, and venous lesions. The patient had been much worried and had endured privations before the attack which no doubt predisposed her to infection. Infectious hæmatemesis may also occur in small quantities and in repeated attacks. A man, aged forty-five years, with suppurating inguinal bubo, suffered from pyrexia, profuse sweats, and vomited his food every day with little blackish clots; the symptoms ceased only when the bubo was opened. The existence of these blackish vomitings in surgical septicæmia is not rare. Infectious hæmatemesis may occur in typhoid fever, tuberculosis, syphilis, &c. In fatal cases nothing like the ordinary round ulcer of the stomach is found; the source of the hæmorrhage is a slight erosion often difficult to find; it appears to result from a miliary abscess. In cases which do not yield to medical treatment and in which the condition of the patient permits it, gastrotomy should be performed to arrest the hæmorrhage; but the surgeon should be warned that he must not expect to find an ordinary round ulcer but this slight erosion for which the search may be long and difficult. We have recently in our Paris correspondence[1] published an abstract of an important paper on this form of ulceration by M. Dieulafoy in which seven cases are mentioned. In two gastrotomy was performed to arrest the hæmorrhage; in one the operation was successful. M. Dieulafoy regards this erosion as an early stage in the formation of the round ulcer. In the latter, also, the French surgeons are now performing gastrotomy to arrest the hæmorrhage when medical treatment fails, as we lately stated in our columns.[2]

THE LICENSING LAWS IN ENGLAND, SCOTLAND, AND IRELAND.

THE drinking propensities of a nation bear, as several writers have shown, a distinct relation to the moral statistics of the nation concerned and therefore a comparison of the licensing laws and usages which obtain in the three kingdoms should convey some useful lessons. A Blue-book was issued on Feb. 23rd containing this comparison. It is not for us to point out the relative degree of sobriety of the three kingdoms, but there are distinct differences and peculiarities in the administration of the licensing laws which may have a distinct moral bearing and from which moralists may draw interesting inferences. Perhaps the discretion of the licensing authorities differs more than anything else. In respect to new grants this discretion is absolute in Scotland and absolute also subject to appeal in respect to renewals. In England the justices have full discretion to grant or refuse all new "on" or "off" licences, but the grant is subject to confirmation or rescindment. And any refusal must be based on one of four grounds. These grounds are that the applicant is not of good character, that the premises are disorderly, that the applicant is disqualified by law from holding a licence, or that the premises are not duly qualified. In England the justices can refuse a temporary transfer without appeal on one or more of the grounds which apply to renewals; but Scotch justices can only refuse when they think the character of the applicant unfit. In Ireland certain grounds of refusal must be held in all cases except that of a beer-retailer's certificate. But in this matter of the exercise of discretion the Irish law principally differs from the English and the Scotch in requiring magistrates to state their grounds of objection in writing, whatever these may be. The closing hours in the respective countries are well known, but it is interesting to remember that there is no three-mile limit imposed upon the *bonâ-fide* traveller in Scotland. In Scotland, again, children under fourteen may not be supplied with drink for consumption either on or off the premises, whereas in England a child over thirteen may be served with anything but spirits "for its own immediate gratification." "A child over sixteen," however, may be supplied with spirits. In Scotland, moreover, no licence is required for music and dancing, for refreshment houses, or for billiards, and in Ireland no licence for billiards is needed. We are confident that there is much food for reflection in this Blue-book for those who have the well-being of the community at heart, and doubtless in due course of time we shall hear of special deductions being made by well-meaning persons who may be nevertheless over-persuaded by feelings not entirely free from prejudice.

[1] THE LANCET, Jan. 29th, 1898.
[2] THE LANCET, Jan. 29th and Feb. 19th, 1898, p. 543.

ENLARGEMENTS OF EPIPHYSES: A COMPLICATION OF GONORRHŒA.

AT the meeting of the Société Médicale des Hôpitaux on Nov. 5th, 1897, M. Paul Claisse presented a girl, aged nineteen years, who showed a new and peculiar complication of gonorrhœa. In the position of the costal cartilages persistent pain had occurred which was increased by sudden movements of the thorax and still more by pressure. A series of nodosities developed on the cartilages meriting truly the name of gonorrhœal rosary. Analogous swellings appeared at the superior epiphyseal junctions of the tibiæ. There was no affection of the joints or tendon sheaths. The patient was of small stature, which with the form of her thorax might suggest that the disease was a manifestation of rickets awakened by gonorrhœal infection. But as the existence of gonorrhœal osteo-periostitis had been demonstrated by Fournier and others, M. Claisse thought that it was natural to attribute the lesions to the direct action of the gonococcus. He explained the special localisation by the age of the patient whose ossification was not yet completed.

RESPONSIBILITY OF ASSAILANTS.

AN inquest was held by Mr. Iliffe at Coventry Workhouse on Feb. 17th on the body of a woman, aged fifty-six years, who, it was alleged, had died from the result of injuries inflicted on her by a man with whom she lived. Evidence was given that on Feb. 5th a dispute arose between the two and the man knocked the woman down twice and seemed to hurt her head. They had not lived happily together and once he had been sent to prison for violence towards her. Another witness testified that the deceased "was never right" after the alleged assault and she became unconscious on the following Wednesday (Feb. 9th). She became paralysed in the right side and died on Feb. 14th. Medical evidence showed that the head was bruised and that there was a small abrasion on the left temple. She died from cerebral apoplexy. "The vessels were already diseased and ready to be ruptured." The coroner informed the jury that after the medical evidence there was no alternative but to return a verdict of "Death from apoplexy." The jury retired and then wanted to recall the medical man, but the coroner said that that could not be done. They then with evident reluctance returned the verdict suggested, but desired that the man should be censured. We agree with this verdict, but can quite understand the "evident reluctance" of the jury.

Deaths of this kind present considerable medico-legal difficulties and each one has to be judged on its own merits. The question of the responsibility of assailants who have inflicted injuries on persons who are not perfectly healthy has several times been raised in courts of law and the judgment usually quoted is that in the case of Bennet *v.* Gedley, when the Chief Baron remarked that a man was not bound to have his body in so sound and healthy a state as to warrant an unauthorised assault upon him. In the case we are discussing the cerebral arteries were atheromatous, but symptoms of paralysis did not supervene until four days after the alleged assault was committed. We doubt, therefore, whether death could necessarily be attributed to the injuries which had been inflicted. Any subsequent exertion on the part of the patient, such as straining at stool, might have produced the rupture of the vessel, and although we commend the finding of the jury as regards censuring the man yet if the case had been sent for trial there would have been little evidence to show that he was directly responsible for the woman's death.

THE GOVERNMENT VACCINE LYMPH SUPPLY.

AN announcement has been made to the effect that the Local Government Board will at once proceed to distribute glycerinated calf lymph to public vaccinators. The statement is evidently premature, for although the Board are making arrangements to secure a proper laboratory where the necessary processes of preparing and storing the lymph can be carried out these arrangements are not yet completed. There must also necessarily be delay after the laboratory and its staff are in working by reason of the necessity of keeping the glycerinated lymph a sufficient period of time for the destruction of extraneous organisms and for testing the keeping qualities of the lymph. If, as announced by Mr. Chaplin, glycerinated calf lymph is to be available for all vaccinations it is clear that the use of humanised lymph must practically cease, and before this can take effect the department supplying the glycerinated lymph will have to feel confident that it can meet the many demands which will be made on it by supplying in large amount a lymph that can be depended on. We therefore doubt whether any such supply as is needed will be forthcoming for some months to come. But there is reason to believe that such a supply will be issued quite independently of the passing of any Vaccination Bill.

THE PREVENTION OF TUBERCULOSIS IN MAN AND CATTLE.

AN important and interesting memorandum on the prevention of tuberculosis in man and in cattle has been presented to the Legislative Assembly of New South Wales by Dr. Ashburton Thompson, the President of the Board of Health. In this memorandum Dr. Thompson discusses the risks to the public from the sale of tuberculous milk and meat and the measures which should be adopted for safeguarding the public and for the elimination of tuberculosis from dairy stock. After stating briefly the powers already existing and the insufficiency of the extent to which they are exercised Dr. Thompson points the conclusion that "it is the interest of every person concerned of the public—the dairyman, butchers, agents, and all other middlemen, back to the breeder—to take steps to eliminate tuberculosis from herds to prevent the disease itself." He proposes that the sale of every bovine animal, and of every pig, though ostensibly "with all faults," must nevertheless be conducted legally, subject to an implied agreement that every such animal shall withstand the tuberculin test applied under conditions to be fixed. "Gradually," he says, "under the necessity which is imposed upon them, breeders would weed their herds and in four or five years might and should be in a position to regard this legal condition with indifference, for it would by that time cease to operate against them. At the same date they would find that their prosperity had been materially enhanced and had become assured." Dr. Thompson then discusses the powers that would be required to bring the breeder into this most desirable position of benefiting the public and himself. He urges the provision of public slaughter-houses for the killing of home-consumed animals and claims the power to systematically test dairy herds with tuberculin and to slaughter reacting animals. He points out that already one of the large milk companies which has its own circle of suppliers in country districts under contract with it has made it a condition of contract that every beast found by its inspectors to be tuberculous shall forthwith be slaughtered, no compensation being paid to owners unless it is found after death that a mistake has been made and that the animal was not diseased. The general principles governing Dr. Thompson's recommendations appear to be sound. What is being done successfully in Denmark can, we presume, be done equally well in New South Wales, and the sure way to success is to make the breeder of cattle understand that by adopting certain measures he will derive benefit himself and will safeguard the public, but that laxity or neglect of these precautions will entail loss upon him.

SANITARY CONDITION OF THE WATER-SUPPLY OF BROOKLYN.

A REPORT has recently been published by the department of health of the city of Brooklyn relating to the water-supply. For some considerable time the fact that a portion of the watershed was in an unsatisfactory state has been well known. From a perusal of the report it appears that there has been no exaggeration in the statement often made that the polluted water of many of the ponds supplying Brooklyn is a standing menace to the health of the inhabitants. The chief source of the water-supply is derived from a number of small streams formerly dammed for use as mill-ponds. Some of these ponds deliver their water through pipes by gravity, while the remainder have their water lifted by pumps to the level of the pipes. From the investigations carried on in the past year the conclusion is arrived at that the water derived from these streams is in a decidedly insanitary state and that it is unhealthy both from a chemical and a bacteriological point of view. As Brooklyn—now a part of Greater New York—has a population of 1,180,000 persons and is steadily growing larger it is obvious that a better and an increased water-supply must be provided. The propositions submitted by the Board of Health with this end in view are as follows: (1) suspension of the use of the decidedly polluted ponds; (2) abatement of nuisances and rectification of insanitary conditions at all other points; (3) preservation of the unpolluted sources of supply in their present sanitary condition; (4) rigid sanitary supervision of the whole watershed with special attention to typhoid fever; (5) maintenance of the feeders, ponds, and reservoirs of the water-supply in a condition free from rank vegetable growths; (6) for the prevention of microscopical growths the covering of all reservoirs used for the storage of ground-water either alone or mixed with surface water—as an alternative, the direct pumpage of such waters to the consumers; (7) proper engineering facilities for the development of the present supply and its extension eastward to compensate for the abandonment of the polluted sources; (8) filtration of a part or of the whole of the present supply; and (9) the acquiring of an entirely new supply outside of the island. The problem presented by the present condition of

the Brooklyn water-supply is a very complicated one, and the Board of Health recommend that the question should be further investigated not only on the sanitary but also on the engineering side, and that all the available evidence should be accumulated and placed in the hands of an independent expert or committee of experts. A systematic, comprehensive, and economical plan based on this evidence should be devised which shall provide for the future as well as the present; in fact, which shall so deal with the whole problem that the water-supply of Brooklyn may be ultimately placed on a thoroughly efficient basis.

A PORTRAIT OF SIR SAMUEL WILKS.

MANY of our readers will remember the fine portrait of Sir Samuel Wilks, President of the Royal College of Physicians of London, which was painted by Mr. Percy Bigland and was hung in the Royal Academy Exhibition of last year, where it was certainly one among the most important pictures of 1897. We have received from the editor of *Guy's Hospital Gazette*, through the publishers of the journal, Messrs. Ash and Co., an engraving of this portrait and consider the engravers to have been very fortunate in the manner in which they have executed their task. Mr. Bigland has himself supervised their work and the result is an excellent reproduction of a fine portrait. The distribution of copies is in the hands of Messrs. Ash and Co. and the price of proofs signed by the artist is one guinea. Sir Samuel Wilks's position and personality should make requests for copies very numerous.

THE MEDICAL SCHOOL OF CAMBRIDGE UNIVERSITY: AN IMPORTANT MEETING.

A MEETING was held on March 2nd, at the rooms of the Royal Medical and Chirurgical Society, 20, Hanover-square, under the chairmanship of Dr. W. Howship Dickinson, to discuss the provision of adequate buildings for the medical school at Cambridge. The meeting was the outcome of Professor Clifford Allbutt's letter to the resident members of the Senate upon which we commented last week. The Right Hon. A. J. Balfour had announced his intention of being present but was unfortunately prevented from attending, and Sir John Gorst also sent a letter of apology. Dr. Dickinson, who was supported in the chair by Professor Clifford Allbutt, Professor Jebb, M.P., Professor Michael Foster, Dr. Alexander Hill (the Vice-Chancellor of the University), Mr. Herbert Page, Dr. Norman Moore, and other Cambridge medical and scientific men, pointed out that the purpose for which the meeting had been called was to discuss the absolute inadequacy of the present accommodation of the buildings of the Cambridge Medical School. There were now some 500 medical students and really no buildings in which they could be taught. The University had provided a site, but the school wanted £50,000 for the buildings and furniture. Professor Jebb, who represents the University in Parliament, in moving the appointment of a committee in London to take all needful steps for the advancement of the medical school, pointed out the enormous growth of that school and how the University, which had so many other pressing needs, was unable to meet all the demands of science and allied subjects. Professor Clifford Allbutt, the Regius Professor of Medicine, seconded the resolution and said that they wanted immediately £20,000 simply for the buildings. As for furniture and equipment, they would have to wait. The Vice-Chancellor then moved a resolution nominating the members of the committee, and Dr. Dickinson was appointed chairman of the committee. We are glad to see that a start has really been made to free the Cambridge Medical School from the hindrances which exist to the perfecting of its work. The science school at Cambridge is perhaps the best in England, but science cannot be taught in a set of scattered temporary buildings and with all sorts of makeshift appliances. Men trained in the medical school at Cambridge are teaching or practising in every region of the civilised world, and we are quite sure that the earnest appeal made by the speakers at the meeting on Wednesday last to Cambridge men will meet with a warm response.

THE CASE OF WILLIAM MANSELL COLLINS.

MR. MUIR MACKENZIE applied on Wednesday last to Mr. Sheil for a summons under Section XL. of the Medical Act of 1858 against William Mansell Collins, of Cadogan-place, for the false assumption of a medical title. Mr. Sheil held that there was nothing in the Act making it compulsory for a medical man to be registered, but added, in declining to grant the summons, that there should be such a provision. We hope that the General Medical Council will continue proceedings in spite of this check.

DEATH UNDER CHLOROFORM GIVEN FOR EXTRACTION OF TEETH.

ANOTHER fatality while chloroform was being administered for a dental operation appears to indicate that the practice of using that anæsthetic in minor surgery is still adhered to. The patient, a healthy man, aged twenty-five years, was given chloroform on Saturday, Jan. 29th, by Mr. Dubourg. Several teeth were removed; then as consciousness appeared to be returning more chloroform was given and other teeth were taken out. Towards the close of the operation and, as we gather from the report before us, after chloroform had again been given dangerous symptoms appeared and ultimately the man died although artificial respiration was practised and restoratives were applied. We are not told what posture the patient was in or the method of giving chloroform employed, but we may assume that the "open method" was used. It is extremely sad that the list of deaths under chloroform should be so long. In many of the cases the operations performed are of such a trivial kind as to make it matter for wonder that nitrous oxide gas is not given in place of a more powerful and dangerous anæsthetic.

ABSENCE OF NORMAL LEUCOCYTOSIS IN CANCER OF THE STOMACH.

AN increase in the number of leucocytes in the blood occurs after a meal. In 1890 Müller observed that this physiological leucocytosis was absent in five cases of cancer of the stomach. He therefore concluded that this fact was of value as a diagnostic test. His view has been confirmed by several observers, including Dr. J. A. Capps, who has published his results in the *Boston Medical and Surgical Journal* of Nov. 4th, 1897. He performs the test thus. The patient fasts for twelve hours and is then given a glass of milk, two eggs, and a sandwich of minced meat. The leucocytes are counted immediately before or after the meal and again three or four hours later. An increase of less than 2000 per millimetre is not considered sufficient to establish the existence of this form of leucocytosis since allowance must be made for errors. If an increase of from 1000 to 2000 is found the result is considered doubtful and the test is repeated. In a series of seventeen cases of cancer of the stomach leucocytosis during digestion was observed only twice. Comparing the most constant signs of gastric cancer with this he found that tumour was absent in four cases, hydrochloric acid was present in four, and lactic acid was absent in four. Thus leucocytosis proved the most reliable test. On the other hand, on applying the test in cases of other diseases he found that digestion leucocytosis was present in three

cases of gastric ulcer and in two of cancer of other organs—liver and adrenals. It was absent, however, in three out of five cases of chronic gastric catarrh. This test, therefore, though apparently as reliable as the hydrochloric acid, is like the latter fallible both on the positive and negative sides.

THE POST OF DIRECTOR-GENERAL OF THE NAVAL MEDICAL SERVICE.

WE understand that Sir James N. Dick, K.C.B., who last month completed ten years' service as Director-General, is to retire at the end of the financial year and will be succeeded by Inspector-General Sir H. Norbury, K.C.B.

THE DEATH OF DR. MALCOMSON.

WE deeply regret to learn the sudden death of Dr. Malcomson, medical officer of health of Middlesbrough. The work involved in the occurrence of over 700 cases of small-pox during the last few weeks had seriously undermined his strength and there is reason to believe that it has been the cause of his death. The Corporation have at once secured a temporary health officer, and Dr. Reece, of the Local Government Board, has returned to Middlesbrough in view of the intelligence received from that borough.

A MEDICAL MAN AND HIS UNQUALIFIED ASSISTANT FINED FOR NOT NOTIFYING.

MR JAMES RALPH COLLYER and his unqualified assistant, Mr. Wadlow, have each been convicted of non-notification of scarlet fever. The principal was fined in respect of the children of Mr. Ireland, and the assistant in respect of the children of Mrs. Hurrell. The Bench in each case fined the defendants 10*s*. It was alleged in the course of the trial that Mr. Collyer's memory was defective and that he never attended cases alone, but was always accompanied by his assistant. Mr. Wadlow in his evidence said he had been twenty-five years an unqualified assistant and had acted as such in Manchester and other places. In both instances he seems to have diagnosed influenza, the cases being afterwards found by Dr. Jolly to be cases of scarlet fever as shown by peeling and other evidence. The case is interesting in several respects, but chiefly perhaps at the present moment in regard to the *rôle* of the unqualified assistant. It is amazing after the recent action of the General Medical Council to see the unqualified assistant playing the same part and assuming the gravest functions and we may add making the gravest mistakes as if the Council had issued no notice on the subject. Mr. Collyer will doubtless make his own explanation of his position, but as the facts stand they strikingly confirm the allegation of loss of memory on his part.

POISONING BY PRIVET BERRIES.

POISONING by privet is a very rare occurrence; indeed, it is not mentioned by some of the most eminent authorities on poisoning. Cases have, however, from time to time been reported. Thus, in 1853 three children ate some privet berries; two of them died after violent convulsions, and the third recovered. In 1857 thirty-seven children suffered from poisonous symptoms after eating freely of acorns and privet berries. The symptoms were a shriveiled appearance of the hands and face, cyanosis, intense thirst, and sickness; opisthotonos was a marked symptom in each case. All the children recovered. In 1866 a child died thirty-seven days after eating the berries, symptoms of gastro-intestinal irritation continuing more or less throughout. In 1872 two children after eating privet berries were attacked with the following symptoms: drowsiness, convulsive twitchings, loss of muscular power, severe vomiting, and purging. On Feb. 18th an inquest was held at York Town on the body of a female child, aged eight years, who died two days previously after a few hours' illness. On the 16th she complained of pain in the head and stomach. At dinner-time she seemed better, but whilst food was being prepared she gave a cry and became unconscious and death took place before the arrival of a medical man. The child's teeth were tightly closed, her tongue protruding and her hands clenched. At the post-mortem examination the heart, liver, and kidneys were found to be quite healthy. The lungs were congested. The stomach was also much congested with one patch of superficial ulceration about the size of a shilling. The medical men who made the examination were naturally puzzled as to the cause which produced these conditions. On inquiry it was found that the child had eaten privet berries. None of these were found in the stomach, but they had probably been discharged by vomiting. The symptoms were in accord with the previously reported cases to which we have referred and we cordially commend the coroner's remarks that he hoped the evidence as to the privet berries would be a caution to parents as to their danger. Children are very apt to partake of any berries which they may see growing on bushes and it is important that the poisonous nature of many of them should be generally recognised.

SCHOOL BOARDS AND VACCINATION.

THE National Anti-Vaccination League recently sent a letter to the London School Board of which the following is an abstract. The letter was one stating that "the Council desire to call the Board's attention to a grievance of long standing with reference to the exclusion of qualified persons from teaching in the Board's schools; to refer to the condition of vaccination and re-vaccination imposed upon persons well qualified to become teachers of children; to state that this is one of a series of disabilities from which unvaccinated persons suffer in this land of pretended enlightenment and liberalism; to point out that it is often boasted (rightly or wrongly) that civil disabilities are no longer imposed on account of belief or unbelief in religious matters; to say that, however this may be, it is certain that in matters medical there is no such liberty; and that they think that it is high time to protest against the infliction of a disability upon persons merely because they do not wish to submit themselves to be inoculated with cowpox disease, and to urge the Board to oppose the attempted exclusion of teachers, otherwise qualified, on the mere grounds that they have not submitted themselves to the infliction of an artificial disease and refuse to submit themselves thereto." The letter was referred to the School Management Committee, who recommended the Board to reply that "they do not desire that any further conditions as to vaccination beyond those required by the Education Department be imposed upon teachers entering their service and have expressed their desire to the medical officer of the Board." At the meeting of the Board on Feb. 24th this answer was put as a motion, but the Rev. William Hamilton moved an amendment as follows:—

"That a representation be made to the Committee of Council on Education requesting their lordships to remove the question, 'Has he (or she) been successfully vaccinated?' from the form of certificate prescribed by the Education Department submitted to probationers and pupil teachers at admission and during their engagement."

The amendment was not carried but the motion was. The London School Board has done a good many foolish things, but it is not quite so fatuous as to agree with the so-called "National" Anti-Vaccination League, and we wonder that that body was silly enough to think that its letter would

carry any weight. There is a great deal too much fuss made nowadays about conscientious views.

LORD SALISBURY'S ILLNESS.

THE following is the history of the illness, happily not serious, from which Lord Salisbury has recently suffered. He took cold in the early part of last week, but continued to work unremittingly till the evening of Feb. 25th, when decided symptoms of influenza appeared, and there was a considerable rise of temperature. At first there was much bronchial irritation, but after two days gastro-hepatic derangement predominated. Lord Salisbury has steadily improved, but his convalescence has been slow in consequence of the excessive work to which he has been subjected. The temperature at the date of the last report was still not quite normal.

CULPABLE CARELESSNESS.

THE consequences of neglect are sometimes not less cruel than those of deliberate injury. This is certainly true of a case recently investigated in Bootle police-court, in which two young children were left alone in a room containing a fire while their parents went "shopping." The result was that both children were severely burned, one fatally. This was the second such accident in this family. The coroner, Mr. Brighouse, commented on this deplorable occurrence in terms of appropriate severity and advised that the parents should be brought under the notice of the Liverpool Society for the Prevention of Cruelty to Children. Parental negligence is, unfortunately, not a new offence. It has been reserved, however, for our own time to recognise its criminal character. With regard to this there can in many cases be no difference of opinion. The motive is evidently bad and the act which follows from it is a glaring illegality. Every case, however, is not thus pronounced, otherwise the punishment inflicted would be as severe as frequent. Neglect within the terms of the Act for the Prevention of Cruelty to Children has practically come to be regarded as implying a wilful evasion of duty. The case we have referred to affords no proof of such evasion. It is rather an instance of gross thoughtlessness. Still the result is as bad as it can well be. It might have been prevented with ordinary care which ought to have been used and was not and this assertion amounts to a condemnation. Censure in the coroner's opinion was under these conditions an insufficient corrective unless it was strengthened by some form of legal compulsion. We believe that every person who understands anything of the meaning of responsibility will admit the justice of this view.

ALCOHOLIC SOMNAMBULISM.

IN a recent number of the *Neurologisches Centralblatt* a paper by Professor Francotte, of Liége, is given in abstract. The paper originally appeared in the *Journal de Neurologie et d'Hypnologie*, of Brussels, and had special reference to the medico-legal relations of the somnambulism which is met with as a result of alcoholism. Somnambulism regarded as the condition in which during loss of consciousness coördinated actions are carried out of which there is no recollection afterwards, is met with not only in hysteria, epilepsy, and the hypnotic state, but also as a result of alcoholic indulgence. Professor Francotte relates the following case of a man who was arrested for disorderly conduct in a public place. He could not be induced to answer questions or even to speak and appeared to be quite demented. There was no sign of intoxication, but next morning at the medical examination he confessed that at a place far distant from that at which he had been arrested he had imbibed a large quantity of alcohol. He had completely lost recollection of what had occurred during the next forty-eight hours. He confessed to other excesses in alcohol and there was marked tremor of the hands and of the tongue. A sister had been the subject of mental disease. Professor Francotte, after citing several examples, concludes that there is a species of alcoholic somnambulism in which the patient behaves to all appearance in a normal way but without consciousness, or at least without having any recollection of what he has done. In reality, however, during such a time certain slight peculiarities of conduct are present which may easily escape the observer. The condition manifests itself only in degenerate individuals or at least in those who have inherited some psychical weakness, and as it is one which implies the absence of responsibility, unless it is intentionally induced, it is of great medico-legal importance.

THE Ninth International Congress of Hygiene and Demography, under the patronage of H.M. the King Alfonso XIII. and H.M. the Queen-Regent, will, as we have already announced, be held at Madrid from April 10th to 17th. Sir Douglas Galton, K.C.B., F.R.S., has been appointed chairman, Professor W. H. Corfield, M.A., M.D. Oxon., hon. treasurer, and Dr. Paul F. Moline, hon. secretary of the British Committee. Official receipts for tickets of membership may be obtained from Professor Corfield, 19, Savile-row, on payment of £1, and the Spanish railway companies will allow 50 per cent. to members of the Congress. All papers must be sent to the Secretary-General, Dr. Amalio Gimeno, by March 15th. Excursions to Spain at low prices have been organised by the Voyages Pratiques de Paris, Rue de Rome.

THE Irish Medical Schools' and Graduates' Association will hold its annual dinner on Thursday, March 17th (St. Patrick's Day), at the Café Monico, at 7.15 P.M. A large attendance is expected to meet the principal guest of the evening, Admiral Lord Charles Beresford, C.B., M.P. Mr. P. J. Freyer, 46, Harley-street, W., is honorary secretary of the dinner committee.

AT the next meeting of the Incorporated Society of Medical Officers of Health, to be held at the offices of the Board of Works for the St. Giles' district, 197, High Holborn, London, W.C., on Friday, March 11th, at 8 P.M., a paper will be read by Dr. J. Wright Mason on "Secondary Scarlatina and 'Return' Cases."

THE report of the Departmental Committee appointed by the Duke of Devonshire to inquire into existing systems for the education of defective and epileptic children has been issued as a Blue-book. The report contains certain points of medical interest to which we shall call attention at an early opportunity.

THE Bishop of London, one of the Vice-Presidents, has consented to preside at the annual general meeting of Governors of the Dental Hospital of London to be held at the hospital, Leicester-square, on Thursday, March 17th, at 5.30 P.M.

MR. EDWARD NETTLESHIP has given £250 to the Royal London Ophthalmic Hospital for the purpose of providing apparatus and appliances for the laboratory and museum in the new hospital now being built in the City-road.

THE Speaker of the House of Commons has promised to take the chair at a dinner at the Hôtel Métropole on April 30th in aid of the building fund of the Royal Westminster Ophthalmic Hospital.

PETROLEUM LAMP ACCIDENTS.

IN accordance with the instructions issued by the Public Control Committee of the London County Council the chief officer, Mr. Alfred Spencer, has issued a further report on the subject of Petroleum Lamp Accidents and their prevention. The report has recently been printed by order of the Public Control Committee. The previous report was issued two years ago and reference was made to it in the report of THE LANCET Analytical and Sanitary Commission on Dangerous Paraffin Lamps which appeared in our columns of Jan. 4th, 1896. It is interesting and instructive to compare the conclusions of Mr. Spencer in the previous report and in the one before us.

In his report printed in 1895 Mr. Spencer, referring to certain experiments, says on page 11 that "the most valuable result is the confirmation of the view that lamps and stoves can without much difficulty or expense be so constructed as to give almost absolute safety *no matter what kind of oil is used*. Several of the lamps experimented with, including some of the cheaper kinds, successfully passed through all the tests and although in most of the lamps which were tested defects in construction were found these defects could in nearly all cases readily be obviated and the lamps be made practically safe. When it is remembered that in these tests the conditions of danger to which a lamp is liable in actual use were exaggerated the conclusion follows *that security from accident is given by a well-constructed lamp*." Further on in his summary of conclusions Mr. Spencer says "that the prohibition by statute of the sale of unsafe lamps would be another means of putting an end to lamp accidents, as both experience and experiment have proved that *mineral oils such as are now in common use can be safely burnt in properly constructed lamps*." In a paragraph which follows he remarks, it is true, that the prohibiting of the sale of unsafe oil, if that be practicable, would be almost immediately successful in stopping the great bulk of lamp accidents and for that reason (that is, because it would take some time to replace unsafe lamps) is preferable. "*The difficulties in the way of effecting this may, however, be insuperable, while there appears to be comparatively little difficulty in regulating the construction of lamps.*" Again, on page 7, he says: "Lamp manufacturers must supply the lamps which the public want, and the reason that safe lamps have not been largely made is because there has been little demand for them, the public attaching much greater importance to the appearance of a lamp than to its safety. I am convinced that many lamp manufacturers would welcome the prohibition of dangerous lamps; they can make safe ones just as readily, and they recognise that the cessation of lamp accidents would increase the demand for lamps. The question of the loss in connexion with dangerous lamps already made and unsold is a more difficult one, but many of them could be made safe at small expense."

Referring now to the evidence placed at the disposal of the Select Committee of the House of Commons which was appointed to inquire into and report upon the sufficiency of the law relating to the keeping, selling, using, and conveying of petroleum and other inflammable liquids, and the precautions to be adopted for the prevention of accidents with petroleum lamps, Mr. Spencer in a summary of this evidence endeavours in his recent report (page 12) to indicate some of the views of the principal scientific witnesses on the question of raising the flash point and he now thinks that "a perusal of the large mass of evidence on this subject would leave the impression on an impartial observer that *raising the flash point would be the best way of preventing lamp accidents*." (The italics all through are our own.) Consequently in the conclusions in his recent report Mr. Spencer is led to say that "the evidence is conclusive that if the higher flash point (100° F.) had been retained very few of the long series of fatal and other lamp accidents in London and elsewhere could have occurred." The mistake has arisen, he considers, by the adoption in the Act of 1879 of a flash point of 73° F. as applied to the safety of oil during transport, handling and storage rather than to the oil while burning in the lamps. In this conclusion he may be right, but why did he fail to point this out in his report two years ago in which he very distinctly states that oil of 73° F. flash point could be burnt with safety in a properly constructed lamp?

The question is whether legislation can more effectually and conveniently deal with the construction of lamps or with the quality of the oil. In both cases considerable difficulties must arise. For instance, in the former case lamps of unsafe construction would take some time to eliminate from our midst, while there is considerable doubt as to whether a substitute of equal merit, convenience, and cost could be obtained in oil flashing at 100° F. or a higher point. The majority of the lamps now in use are certainly not constructed to burn oil of a high flash point. The wick soon cakes and a most disagreeable smell is evolved. It would appear, therefore, that whichever course be adopted the construction of the millions of lamps now in use will have to be modified. In that case no argument can be urged, it seems to us, more in favour of raising the flash point of oil than of enforcing the employment of specially constructed lamps. We are inclined to the view that lamps constructed on safe lines—that is to say, which will burn oil of 73° F. flash point satisfactorily—is the only practicable course for legislation to adopt. We are convinced, as Mr. Spencer was but apparently is not now, that lamps can be so constructed as to burn oil of 73° F. flash point quite safely. It must be remembered that lamps are in use by a very great number of the community who can afford to use well-designed lamps and yet, notwithstanding all the accidents that are reported, few if any have been shown to occur in these instances. We lay great stress upon this fact because it is the evidence of experience. However closely we may consult the statistics of lamp accidents we cannot find any serious accidents having occurred in houses where lamps of good design are likely to be employed, and it must be borne in mind that the great middle class are large consumers of oil.

We must still await a definite pronouncement upon these points and the difficulty of coming to a right conclusion is evident from the fact that a Select Committee of the House of Commons which was appointed to inquire into the subject early in the session of 1896 has not yet concluded its labours.

THE LONDON UNIVERSITY COMMISSION BILL.

THE BILL.

THIS Bill is entitled "An Act to make further provision with respect to the University of London." The first clause enacts that there shall be a body of Commissioners styled the University of London Commissioners.

This clause also provides for the appointment of a secretary to the Commissioners and of new Commissioners in case of a vacancy occurring. Under it powers are given to the Commissioners to employ and pay persons whose services are required to carry out the Act.

The second clause fixes the duration and proceedings of the Commissioners, whose powers shall continue until the end of 1898. The Privy Council on the application of the Commissioners can prolong the powers until the end of 1899, but no longer.

The third clause defines the powers and duties of the Commissioners as follows:—

1. The Commissioners shall make statutes and regulations for the University of London in general accordance with the scheme of the report hereinbefore referred to, but subject to the modifications specified or indicated in Part I. of the schedule to this Act, and to any other modifications which may appear to them expedient after considering the changes which have taken place in London education of a university type since the date of the said report and any representations made to them by or on behalf of the Senate or Convocation or any fifty graduates of the University of London, or by or on behalf of any body or person affected.

2. In framing such statutes and regulations the Commissioners shall see that provision is made for securing adequately the various matters specified or indicated in Part II. of the schedule to this Act.

3. The statutes or regulations, whether they are made by the Commissioners or by the Senate as hereinafter provided, shall not authorise the assignment of money for any purpose in respect of which any privilege is granted or disability imposed on account of religious belief. Provided that they shall not prevent the University from allocating funds, on such conditions as it thinks fit, for the payment of any person appointed or recognised by the University as a University teacher, or for his laboratory expenses, or for apparatus to be used by

him, notwithstanding any conditions attached to any office held by him in any school of the University.

4. Statutes and regulations made under this Act shall have effect notwithstanding anything in any Act of Parliament, charter, deed, or other instrument.

The fourth clause provides for the approval of any statutes and regulations made by the Commissioners. When any statute or regulation has been made by the Commissioners a notice of its having been made and of the place where copies of it can be obtained is to be published in the *London Gazette* and the statute or regulation shall be laid as soon as may be before both Houses of Parliament and shall not be valid until it has been approved by the Queen in Council.

Either House of Parliament may stay proceedings on any statute or regulation by praying the Queen to withhold her assent within forty days of the statute or regulation being laid before that House; while "the Senate or the Convocation of the University of London or any other person or body directly affected by any such statute or regulation may, within three months after the notification thereof in the *London Gazette*, petition Her Majesty in Council to withhold her approval of the whole or any part thereof." The Privy Council will decide on the merit of such petitions.

By the fifth clause, after the expiration of the powers of the Commissioners, the senate of the University shall have power to make statutes and regulations for altering or supplementing any of the statutes or regulations made by the Commissioners subject to the same conditions of approval as prevailed for the statutes and regulations of the Commissioners.

The Act is to be cited as the University of London Act, 1898.

THE SCHEDULE.

The following is the schedule which is referred to in the third clause of the Bill as modifying in some directions the report of Lord Cowper's Commission, in general accordance with which the new scheme has been constructed:—

PART I.

Provisions to which effect is to be given.

In framing statutes and regulations the Commissioners shall give effect to the following provisions:—

The Senate.

1. The Senate shall consist of the Chancellor and of fifty-five other members, appointed as follows:

Four by the Crown.

Seventeen by the Convocation, of whom the chairman of Convocation shall be one and the remaining sixteen shall be elected by the registered graduates in their separate faculties in such proportions as the Statutory Commission shall determine.

Two each by the Royal Colleges of Physicians and Surgeons.

Four by the Inns of Court and two by the Incorporated Law Society.

Two each by University and King's Colleges.

One by the Corporation of London.

Two by the London County Council.

One by the Council of the City and Guilds of London Institute.

Sixteen by the faculties.

2. The Senate shall be the supreme governing body and executive of the University. All University property shall be administered by the Senate and (except as hereinafter specified) the Senate shall have the entire conduct of the University and all its affairs and functions provided always that—

(*a*) No religious test shall be adopted and no applicant for a University appointment shall be at any disadvantage on the ground of religious opinions.

(*b*) No procedure to a higher degree shall be allowed without examination or other adequate test, nor shall any honorary or *ad eundem* degree be conferred unless the Senate in exceptional cases think fit to confer such a degree on a teacher of the University.

(*c*) No disability shall be imposed on the ground of sex.

3. There shall be three standing committees of the Senate—

(1) The Academic Council, being a committee for internal students of the University.

(2) The Council for External Students, being a committee for those students of the University, whether collegiate or non-collegiate, who are not internal students of the University.

(3) A standing board to promote the extension of University teaching.

The Chancellor, the Vice-Chancellor, and the Chairman of Convocation shall be *ex-officio* members of all the above committees.

The functions of these three committees shall be advisory.

The Academic Council.

4. This Committee shall consist of the sixteen members of the Senate appointed by the faculties, the three *ex-officio* members, and a senator or senators selected by the Senate to make the number of members up to twenty.

The Council for External Students.

5. This Committee shall consist of the sixteen members of the Senate appointed by Convocation, other than the Chairman of Convocation, the three *ex-officio* members, and senators elected by the Senate to make the number of members up to twenty-eight.

The Board to Promote the Extension of University Teaching.

6. This committee shall consist of the three *ex-officio* members and senators elected by the Senate.

The Convocation.

7. Convocation shall include, in addition to those members specified in the said report, future graduates possessing a degree higher than that of Bachelor.

Teachers of the University.

8. The teachers of the University shall be—

(*a*) Professors, assistant professors, readers, and lecturers directly appointed as officers of the University; and

(*b*) Members of the teaching staffs of public educational institutions situate within a radius of thirty miles from the University buildings who have been recognised as teachers of the University.

The Commissioners shall determine who are in the first instance to be recognised as teachers of the University.

Internal Students.

9. Internal students of the University are students who have matriculated at the University and who are pursuing a course of study approved by the University in a school or schools of the University or under one or more of the recognised teachers of the University.

Faculties.

10. The Commissioners shall determine in the first instance what the faculties are to be and what teachers are to be members of the respective faculties.

The number and distribution of the faculties may be altered from time to time by the Senate.

The faculties will consist of:

(1) The professors, assistant professors, readers, and lecturers appointed by the University; and

(2) Such other teachers of the University as may be admitted to a faculty from time to time by the Senate.

Members will be assigned to their respective faculties by the Senate and no person shall be eligible to vote in an election in more than one faculty at the same time.

Board of Studies.

11. Boards of studies shall be constituted for the subjects of University study.

The members of each board of studies shall be appointed by the Senate from—

(*a*) Members of a faculty who teach or examine in the board's subjects.

(*b*) Other teachers of the University who teach the board's subjects.

The Senate may also appoint such other persons, not exceeding one-fourth of the total number of the board, as they may think fit.

Adequate representation on each board shall be secured for teachers of the University not belonging to any school of the University.

A teacher of the University may be assigned to more than one board.

Examinations.

12. Unless the Senate, either generally by regulation or as to a particular subject by order, otherwise, determine, separate examinations shall be held for internal and external students respectively and each certificate and diploma shall state whether the candidate has passed as an internal or as an external student; but the degrees conferred

shall represent the same standard of knowledge and attainments. Internal students shall be admissible to the examinations for external students if they prefer to graduate on those terms. The draft of any such regulation shall be communicated to Convocation.

In all examinations the Senate shall if practicable appoint in each subject at least one examiner who is not a teacher of the University.

PART II.

Matters for which Provision must be made.

1. The adequate protection of the interests of all classes of students, whether external or internal, collegiate or non-collegiate.

2. The recognition as teachers of the University of duly qualified teachers and lecturers, giving instruction of a university type in public educational institutions situate within a radius of thirty miles from the University buildings, whether such institutions be schools of the University or not.

3. The inclusion under proper regulations as internal students of the University of students who have matriculated at the University, and who are pursuing a course of study approved by the University under one or more of the recognised teachers of the University.

4. The due representation on the Senate and the Academic Council of all subjects of study and all sections of teachers of the University.

THE ROYAL COMMISSION ON THE METROPOLITAN WATER-SUPPLY.

THE thirteenth meeting of the Royal Commissioners was held in committee room A at the House of Lords on Monday, Feb. 28th.

The whole of the sitting was occupied by the examination of Mr. W. H. Dickinson, chairman of the Water Committee of the London County Council, who handed to the Commissioners a long "confidential report" which formed the basis of his examination. The time was taken up chiefly in the elucidation of the policy of the London County Council with regard to the water-supply, and it was seen that this was modified according to the composition of that body, which was subject to change as the result of a new election. A large number of papers were put in and of these some were not read *in extenso*.

Mr. DICKINSON stated that he had been chairman of the Water Committee of the London County Council for three years. In the year 1889 the Council had no power to promote Bills in Parliament. In the year 1890 the Council communicated with the water companies to inquire if they were prepared to negotiate as to the sale of their undertakings, and investigations were made as to the sources of supply with a view to learning if they were adequate in quantity and good in quality. A communication was made to Lord Salisbury with regard to the water-supply and it was announced that a Royal Commission would be appointed to inquire into the matter. Lord Balfour was appointed chairman and the ultimate result of the inquiry was the issue of the report which is usually called by his name. In the year 1891 the Corporation of the City of London promoted a Bill which was referred to a committee presided over by Sir Matthew White Ridley. The report given by this committee made six important recommendations, which were as follows:—

1. That powers should be granted to the London County Council to expend such further sums as may be reasonably necessary, in order that they may examine thoroughly for themselves, as the responsible municipal authority of London, the whole position of the metropolitan water-supply, and come to a conclusion as to the policy which, for financial and other reasons, it is desirable to adopt.

2. That, if they shou'd so resolve, they should have power to promote a Bill or Bills in Parliament for the purpose of constituting themselves the responsible water authority for London, acting through a statutory committee, appointed either wholly by themselves or partly in conjunction with the Corporation of the City of London, as suggested to your committee on behalf of both bodies. Such statutory committee to comprise a certain number of members possessing special knowledge and qualifications, not necessarily members of the body or bodies appointing.

3. That the London County Council, if constituted the water authority, should be required to purchase, either alone or in conjunction with such of the authorities of the outside areas as may be arranged, the undertakings of the eight water companies (except possibly certain lands of the New River Company) by agreement, or, failing agreement, by arbitration, within a fixed period.

4. That, subject to any such arrangements, the new water authority should take over the duties and obligations which the present water companies now have towards the consumers of water in the districts outside the boundaries of the county of London but within the limits of supply of the present companies.

5. That in the event of purchase by the new authority power should be given to that authority, and to the authorities of the outside areas, to negotiate for the purchase by the latter (*a*) of so much of the works of distribution as is appropriated to the district of such local authority and of the right to a supply of water in bulk from the new authority; or (*b*) possibly of some of the sources of supply which with their works of distribution it might be found practicable and advantageous to sever from the general scheme.

6. That those local authorities which, like Croydon, Richmond, and Tottenham, are situated within the metropolitan water area but have their own independent water-supply should, in the event of the purchase of the water companies by the new water authority, be guaranteed in the exercise of their present rights.

The London County Council of that time were of opinion that the recommendations numbered respectively 1, 2, 4, and 5 were in accordance with their views, but they could not accept the recommendation numbered 3. In any scheme of purchase it appeared to them that the legal position of the water companies should be carefully investigated and that purchase should not take place simply in accordance with Stock Exchange quotations. Sir Thomas Farrer (now Lord Farrer) made a report in which he gave it as his opinion that it would not be worth while to buy the undertakings of the companies at the price of £30,000,000 and then to spend from £10,000,000 to £20,000,000 more for a fresh water-supply, and the London County Council were unwilling to accept the condition that they should purchase these undertakings by agreement or arbitration within a fixed period. Mr. Dickinson pointed out that since 1880 a large capital outlay had been made by the companies on pumping arrangements, filter-beds, mains, and on the extension of reservoirs. The funds for doing this had to be provided by the companies and the outlay had not led to a corresponding increase of income.

In answer to the CHAIRMAN the witness said that there were difficulties in estimating the actual money value of the properties of the water companies and that an arbitrator would not find the matter an easy one. With regard to the amount of dividends paid the overcharges which had been made by the companies before the decision in the case of Mr. Dobbs made a considerable difference to their incomes, and with regard to other charges it might be proved also that the consumers paid too much. In the case of the water-supply there was no legal monopoly possessed by any company and the Council did not think that it would be well to buy the concerns of the companies on ordinary arbitration terms. A Bill was introduced by the London County Council to prevent the water companies from increasing their charges when the London property was revalued. This Bill was supported by twelve metropolitan members, but it was blocked and did not pass.

The witness was examined with reference to a memorandum which he had written in 1894, and which had been printed for the use of members of the London County Council to guide them in adopting a wise policy. He thought that now this memorandum did not carry much weight, but the CHAIRMAN considered it of value and read some of the conclusions to which the witness had then come. In the memorandum Mr. Dickinson said that a sufficient amount of water was not to be found under London, and that the Thames was a source of danger in its polluted state. For the requirements of the future the part round London, the "outer ring," was likely to increase in population at a much higher rate than London itself, and would therefore require a larger proportional increase of water. The London County Council therefore should not incur the risk of buying the undertakings of the companies, it would be better to leave them to carry out their obligations for the present and not take them over before the year 1931 and then the supply should be taken over at the price of the actual value of the materials and plant.

Major-General SCOTT asked witness if he now expected to get the water companies for a less sum than £30,000,000.

Mr. DICKINSON was not willing to give an answer on this point and the CHAIRMAN said he had purposely avoided any such question. In the purchase of the companies the witness thought that an arbitrator should receive special directions as to the questions he should take into consideration in estimating the value of the water businesses. The adequacy of the supply, the condition of the plant, and the powers possessed by the companies should also be taken into account and also the fact that when some of the companies were started they were permitted to do so in order that competition between

rival undertakings would lead to a reduction of the price charged for water.

Mr. CRIPPS, Q.C., was not aware that there had been at any time actual competition between the different water companies. He did not think that they could now be compelled to undersell one another.

Mr. LE BOCK PORTER asked whether water consumers could not compel the Southwark and Vauxhall Water Company to supply them with water if they lived in the district of that company.

Mr. DICKINSON pointed out that in the case of Battersea if the West Middlesex Water Company carried out their statutory power and supplied that part of the metropolitan area the charges paid by the consumers would be smaller than they are at present. The witness stated that in his opinion in arbitration cases customs had grown up which were not applicable to the purchase of such undertakings as the London water companies and it was on this account that he thought it was necessary that an arbitrator should have special instructions given him with regard to the things which he should take into account in his estimate of the value of the various undertakings. He did not think that the supply of water from the Thames and Lee would be permanently satisfactory with regard either to the quantity or quality, and that it would therefore be better to obtain a supply from some pure source from which it would flow by gravitation to London. The water of polluted rivers was capable of conveying the infection of cholera. The Usk and Llangorse districts would form good sources of supply.

In answer to the Chairman, Mr. DICKINSON said that he did not think that the London County Council could carry out this scheme independently of purchasing the present water undertakings, and he agreed with Mr. Cripps in thinking that it would not be possible to pass a Bill to enable them to obtain a supply from Wales unless at the same time the present undertakings were purchased. In 1897 Sir B. Baker and Mr. Deacon were employed to make an examination of the scheme which Sir Alexander Binnie had planned and they made a favourable report of it. The London County Council had expressed their views on the future water-supply of London in the following resolutions:—"1. That it is in the interests of London that the requisite augmentation to its supplies of water to meet the needs that may ultimately be felt should be derived from some source other than the rivers Thames and Lee. 2. That the valleys of the Usk, the Wye, and Towy, with their tributaries, furnish a suitable area from some part of which supplies might be derived. 3. That the Usk and Llangorse section of the Welsh scheme should be undertaken in the first instance."

The next meeting will take place on Monday, March 7th. The place of meeting has not at present been arranged.

THE DIAGNOSIS OF GONORRHŒA.

A CASE involving an unusual point was heard on Feb. 25th in the Probate, Divorce, and Admiralty Division of the High Court of Justice before the President, Sir F. Jeune. It was a petition by a wife for a decree *nisi* for a divorce on the ground of adultery and cruelty. The husband answered denying the allegations, but the case was originally taken as undefended and a decree *nisi* pronounced. A rehearing was granted on the ground of surprise and the evidence was now taken *de novo*.

On behalf of the petitioner the adultery and cruelty were sought to be proved by calling two medical men who had attended the parties and who pronounced both to be suffering from gonorrhœa. Mr. Purdie, who was the first practitioner consulted by the husband, stated that he had been suffering at least ten days when he came to him. He had no doubt that it was gonorrhœa, though he did not use a microscope. He agreed that the true character of the disease could only be determined microscopically, but the existence of a microbe had not been distinctly proved and experts were divided in opinion with regard to it. In cross-examination he said that urethritis was an inflammation of the urethra the treatment for which was the same as for gonorrhœa. It might be induced by connexion with a woman who was not cleanly or who was suffering from leucorrhœa. The microscope was the only mode of distinguishing between the two diseases.

Mr. Claremont, who examined the respondent some days after Mr. Purdie, said that he was then suffering from gonorrhœa in an acute stage. Witness had no doubt it was caused by contagion. When witness told respondent that he was suffering from gonorrhœa he denied it. Cross-examined, he said that the question of the origin of gonorrhœa *de novo* was quite unsettled. It was more contagious than simple urethritis. The latter frequently arose from contact with a woman suffering from leucorrhœa. The symptoms of urethritis and gonorrhœa were more or less the same. Except for the amount of the inflammation and the amount of the discharge there was no external difference in the symptoms of gonorrhœa and urethritis.

The respondent, a man aged sixty-five years, denied on oath the adultery and stated that he became unwell a few days after having had connexion with his wife. The petitioner was sixty-three years of age, and during the whole time of his married life (a few months) he had had intercourse with her on two occasions only and his illness followed directly afterwards. He did not suspect his wife's chastity, but he believed that without having the gonorrhœa she gave him the disease from which he suffered. Medical evidence was then called to disprove the allegation that the respondent was suffering from gonorrhœa.

Dr. W. A. Dingle said that from the appearances of a patient, as well as by going into the history of the case, it might be possible in ordinary cases to say whether he was suffering from gonorrhœa, but there was no absolute certainty without microscopical examination. The microscope would show whether or not the microbe of gonorrhœa was present. Urethritis might be produced by having connexion with a woman suffering from leucorrhœa. He believed also that the simple act of connexion in an old man who had not had sexual intercourse for some years and who had taken nourishing food prior to so having connexion might produce urethritis.

Mr. de Méric, surgeon to the French Hospital, deposed that he treated about 100 patients a week for gonorrhœa. He did not think that any medical man could speak with certainty as to the existence of gonorrhœa without microscopical examination to discover the presence of the bacillus of the disease. Leucorrhœa in women would set up urethritis in men, the symptoms of which were similar to gonorrhœa.

The President: What is the difference between the symptoms of the two diseases?

Mr. de Méric said that in gonorrhœa there was much more inflammation and discharge and it was much thicker. In urethritis the discharge was much less thick nor was it coloured green and yellow as in gonorrhœa. He saw the respondent after he was cured and from his replies he came to the conclusion that he had not suffered from gonorrhœa.

The President, in giving judgment, said it was necessary for the petitioner to make out that the disease from which she and the respondent suffered was of a venereal character. The evidence which had been given did not show conclusively that the disease from which the respondent suffered was gonorrhœa. Without wishing to blame Mr. Claremont he regretted that he did not take steps to ascertain more clearly that the respondent was suffering from gonorrhœa, although of course at that time no one thought the determination of the question of vital importance; the conduct of the respondent was moreover inconsistent with that of a guilty man. He dismissed the petition with costs against the wife, she having separate estate.

ST. JOHN AMBULANCE ASSOCIATION: HOME HYGIENE.

A DEPUTATION of the honorary surgeons of the Metropolitan Corps of the St. John Ambulance Brigade, headed by Mr. Osborn, the chief surgeon, waited upon Sir Herbert Perrott, the chief secretary of the St. John Ambulance Association, on Feb. 18th, with reference to the circular on Home Hygiene recently issued by the Central Executive Committee of the Association.

The deputation was introduced by Colonel BOWDLER, the

Deputy Commissioner, and the objections to the circular were stated by Mr. OSBORN, Dr. BLACK JONES, and Mr. HOWARD.

The CHIEF SECRETARY, in reply, said that he was very pleased to meet the deputation of the honorary surgeons, as it afforded an opportunity for talking things over. With regard to the scheme itself it was brought forward in the first instance by a medical man and had received the approval of the medical men on the Central Executive Committee; in fact, that part of the scheme referring to the special lecturers and the elementary certificates was drawn up by the medical sub-committee. He did not know whether it would be taken up by laymen or not, but he did not expect that in the first year there would be more special lecturers appointed than could be counted on the two hands. Home hygiene was now required to be taught in the evening continuation schools and it was thought that there would not be sufficient medical men who would give lectures at the small fee. He could positively assure the deputation that the committee would never allow lay lecturers in first aid and nursing. He would ask Dr. Jones to lay his technical objections before him in writing so that he could put them before the Central Executive Committee. He was also certain that medical lecturers would be preferred to lay lecturers. The standard of examination lay entirely with the Examining Board and he was certain that it would be a most thorough test.

THE BATTLE OF THE CLUBS.[1]

FRIENDLY SOCIETIES AND THEIR MEDICAL OFFICERS: A CLEAR PRONOUNCEMENT.

IN the issue of the *Friendly Societies Recorder* for Feb. 19th is a sound and sensible article by Dr. C. E. Baddeley, of Newport, Salop, on the Relation of Friendly Societies to their Medical Officers. We desire to congratulate the editorial management of the *Recorder* on the fairness that has prompted the publication of the paper. Dr. Baddeley discusses and answers the question, What amount of work and expense the reasonable demands of a friendly society entail upon its medical officer? Of course he says there will be great differences depending upon whether the district is a scattered one or not. A medical man's fees are not all clear profit, for the following expenses have always to be met: (1) dispensary and surgery, with rates, taxes, lighting, firing, water, &c., although sometimes these are provided by the society; (2) a dispenser, unless the medical officer is allowed regular hours at the dispensary; (3) drugs, bottles, and sundries; (4) instruments; and (5) professional assistance and payment of a locum tenens in case of absence. Of course, the majority of medical men have to incur these expenses for the carrying on of their profession whether they are the medical officers of a friendly society or not, but they have to be paid for before any real profit is arrived at, so the friendly society ought to bear its share in lessening the taxes on profits. Another item of expense, and that a very heavy one in a scattered district, is horseflesh or other means of locomotion. Dr. Baddeley calculates the expenses as at the very least £100 per annum.

Next comes the question of pay. Taking as a basis the return of the Registrar of Friendly Societies Dr. Baddeley comes to the conclusion that at least 3 per cent. per annum are constantly sick. Suppose that these three require seeing every third day it amounts to the same thing as seeing 1 per cent. every day. In a society of 500 members on this basis five will require to be seen every day. Every member contributes 4*s.* per annum—i.e., the 500 members pay in all £100. Therefore, the society has £100 to spend in a year—i.e., practically 5*s.* 6*d.* per diem; and 5*s.* 6*d.* per diem for seeing five patients a day comes to a trifle over 1*s.* per visit. This would be the sum received even if the whole of the fees were paid over to the medical officer, but there must always be some deduction for the working expenses of the society, although this may be a small item. It is argued that the law of supply and demand comes in and that if one medical man will not do this work for this pay there can always be found another who will. Unfortunately this is too true, but the work may be well done or badly done. Friendly societies should be willing to pay a fair price for a good article and in Dr. Baddeley's opinion a society may very well consider the element of quality in estimating the commercial value of a medical officer.

Dr. Baddeley next considers the question of sufficient remuneration and concludes that for the medical officer to get even the smallest profit members ought to pay 5*s.* per annum. He arrives at this sum in the following way:—

"Let us for a moment consider an ideal friendly society (such as does not exist) where all the members are located in a number of adjacent streets, where everyone is a member, and pays 5*s.* per annum as his or her medical contribution, and the medical officer dwells in their midst. How many members will be required to give the medical officer a reasonable profit for his work and how much work will he have to do daily for such a number? I am assuming now that the medical officer provides dispensary, &c. The figures I am now going to put down, it will be obvious to all, are too low, but I take round numbers as easy of calculation and sufficient to point a moral.

	£	*s.*	*d.*
"Preliminary expenses—			
"Dispensary rent £25, rates £2 10*s.*, taxes £1, fire £1, water £1	30	10	0
Dispenser (indoor)	75	0	0
Drugs £20, bottles and corks £10	30	0	0
Sundries	10	0	0
Surgical and medical appliances	10	0	0
Professional assistance, &c.	10	0	0
"Total	£165	10	0

"To meet such a demand the contributions of 662 members would be required and there is no provision made for house rent, taxes, &c., for the medical officer. Assuming these to amount to the modest sum of £50 an additional 200 members are required to provide it."

Travelling expenses will be at the very least £10 per annum, this meaning another 40 members, making 902 members in all, to provide for working expenses. But then the medical officer must have some small income for clothing, food, and the like; putting this at the very modest sum of £200 per annum this will require another 800 members. So that for a man to earn a clear profit of £200 a year by doing very hard work and after spending five years of time and £1000 in money he must have 1702 possible patients to be responsible for. On the 1 per cent. per diem basis he will have to pay seventeen visits a day, and taking fifteen minutes a visit, which includes the time taken up in getting from one patient to another, he will work four and a quarter hours per diem. Allow one hour for meals during working hours and the total is five and a quarter hours. Then, too, he is liable to be called upon at any hour of the day or night. True, if the numbers of members increase the income increases too; but so does the work, and even if we take Dr. Baddeley's impossibly favourable combination of circumstances the medical man may attain an income of £450 per annum for an eight hours' day, but this eight hours will be spread over every hour of the day and night.

Dr. Baddeley next proceeds to answer the question—Why can a man always be found to take work of this kind?—and gives the following reasons: (1) ignorance; (2) to fill up gaps in his private practice, which is commercially unsound; (3) to obtain an introduction to people who may eventually become private patients; and (4) to keep out another practitioner. This Dr. Baddeley considers is not only against commercial morality but is also commercially unsound. Dr. Baddeley hopes for an arrangement on a mutually satisfactory basis to be arrived at. Certainly his excellent paper goes some way towards clearing the ground for such, but we fear that the class of persons belonging to friendly societies do not as a rule recognise the responsible and arduous nature of a medical man's work. As we have said before we are quite certain that no single man who belongs to a friendly society would undertake to look after the drains, lighting and plumbing of a house, to say nothing of 1702 houses, and to run the chance of being dragged out of his bed any and perhaps every night for the remuneration of a penny a week per house, he to find his own tools and material, and why should a medical man be expected to look after people's bodies, which are more complicated structures than a house, for the same sum?

THE BATTERSEA PROVIDENT DISPENSARY.

Canon Erskine Clarke, the president of this dispensary, sends us a copy of the report for 1897, which report, in the opinion of the committee, shows a very satisfactory state of

[1] A reprint of the previous articles on the above subject has been published in book form entitled, "The Battle of the Clubs," and can be obtained from THE LANCET Office, price 1*s.*

affairs in that the number of members entered on the books during the year exhibits an increase over that of any previous year. The dispensary appears to be doing good work upon lines that should benefit the poor without cheating the medical man. *O si sic omnes!* Of £3244 spent £80 was placed to the credit of the Reserve Fund, £406 was spent on Drugs and Instruments, £116 on Domestic and Establishment charges, £187 on Rents, and £224 on Official Salaries. £1536 were paid to the Medical Officers (not including £293 as Confinement Fees) and £563 to the Dispensers. We have disregarded shillings and sundry small items in this abstract from the receipt and expenditure account for the year. The rules for benefit members only recognise two classes of beneficiaries—a class whose average weekly income is under 30*s.* and a class whose average weekly income is under 50*s.*—so that in a manner a wage-limit is imposed. All contributions to the funds of the institution derived from weekly payments are distributed annually among the medical officers after the current expenses have been defrayed and these current charges form, in our opinion, but a moderate percentage of the expenditure.

THE MANCHESTER AND SALFORD UNITED FRIENDLY SOCIETIES' COUNCIL.

This body, which met recently in Manchester, would seem to possess among its component delegates gentlemen who do not share the views of Dr. Baddeley as to the remuneration of the medical officers of medical aid societies and we are certain that to work *under* these persons would be a very different thing for a practitioner from working *with* Canon Erskine Clarke and his committee. Brother J. B. Hargreaves, a Rechabite, maintained, we learn from the *Manchester Courier*, that the medical officers were well paid and that "the friendly societies had greatly assisted them to build up their practices," forgetting that the resignations of medical officers as soon as they can get something better to do can hardly be adduced as proofs of the enjoyable nature of the appointment given up. Brother Matley said, in contradiction of Mr. Hargreaves's assertion that the medical officers were well paid, that "his doctor remarked to him that the fees paid did not exactly pay him, but the money was sure." Brother Pedder suggested that the term medical *service* should be substituted for medical *aid*, as he considered that medical men were paid for the services they rendered and "if they said not, let them advance their reasons." We refer Mr. Pedder to Dr. Baddeley's article as well as to many articles in our own columns. He need not remain in ignorance of the legitimate objections of the medical profession to medical aid associations one minute longer than he chooses.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL INSPECTORS OF THE LOCAL GOVERNMENT BOARD.

Upon an Outbreak of Enteric Fever at Wadebridge, in the Rural District of St. Columb Major; upon the Sanitary Condition of the Place; and upon Administration by the St. Columb Major Rural District Council, by Dr. G. S. BUCHANAN.[1]—Wadebridge is a small town on the River Camel, some six miles above its mouth at Padstow on the north coast of Cornwall. In the autumn of 1897 this town, which with the village of Egloshayle on the opposite side of the Camel has a population of about 2000, suffered heavily from enteric fever. No fewer than fifty cases and nine deaths occurred in Wadebridge and Egloshayle, while elsewhere several cases, some of which were fatal, appear to have been due to infection contracted in Wadebridge. The severity of the outbreak was still more manifest when the distribution of the houses invaded by fever came to be studied. Dr. Buchanan found as a result of house-to-house inquiry that in a locality in Wadebridge which he terms the "Trevanson-street area," comprising a group of thirty-seven dwellings, fever had occurred in as many as twenty-two, whereas in the rest of Wadebridge and Egloshayle only eleven out of some 480 dwellings had been invaded. The distribution of these dwellings and the number of cases in each are illustrated in a map which accompanies the report. Dr. Buchanan attributes this heavy incidence of fever within "Trevanson-street area" to specific contamination of the ground water which is drawn from the four wells situate close to one another within this area. The principal reasons for this conclusion were three. Firstly, there was negative evidence which tended to exclude any wholesale operation of agencies of infection other than water, and on the other hand there was positive evidence that the area of supply of these four wells coincided with the area severely affected. Secondly, in all but four instances each of the fifty persons attacked was ascertained either to have been living within the Trevanson-street area or to have drunk water from one or other of the Trevanson-street group of wells at the date or dates on which infection was presumably contracted. Thirdly, within the Trevanson-street area only fifteen houses escaped fever. Of these, the inhabitants in three instances were old people who might be considered unlikely to contract the disease; the occupants of other two dwellings always boiled their water; while in seven other dwellings which escaped the occupiers had obtained all drinking-water from wells outside Trevanson-street area altogether. The opportunities of contamination of water supplied by these four wells seem to have been numerous. Dr. Buchanan shows that infection of this water shortly antecedent to and during the first weeks of the outbreak may well have been occasioned by direct soakage of sewage from a rubble drain which passes near each of the wells and which during this period was receiving infectious matters from a water-closet in a house where one of the earliest cases of fever occurred. And in any case, it would appear, the soil which is drained by these wells was so befouled that the enteric fever organism, once introduced, must needs have found abundant opportunities of multiplying therein.

The history of the sanitary administration of Wadebridge by the local authority of the place, the St. Columb Major rural district council, is one of gross neglect. From the facts given in this report it seems open to doubt whether this district council performs any sanitary duties whatever. In this district there is no notification of infectious diseases, there is no isolation hospital, there are no by-laws and no adoptive acts are in force. In the case of Wadebridge, which there appears no reason to consider the only part of the St. Columb district in which sanitary matters are neglected, there is no public water supply, notwithstanding the known unwholesomeness of nearly every well in the town; the sewers are mere rubble drains soaking into the rock wherein the wells of the place are sunk; and there is no system of public scavenging. All these and other unwholesome conditions have been allowed to persist despite the repeated advice of an able medical officer of health and despite numerous representations made for years by the Local Government Board and by the Cornwall County Council. A conspicuous instance of indifference to the public health of the district is afforded by the refusal of this council to entertain the question of giving Wadebridge a wholesome public water-service even when residents in the town had been to the trouble and expense of drawing up a detailed scheme for such a supply and of obtaining expert opinion upon its purity and sufficiency. Fortunately for Wadebridge it appears likely that this town, in combination with the adjacent village of Egloshayle, will shortly become a separate urban district and its inhabitants will then have an opportunity of inaugurating the extensive series of sanitary works which the neglect of the present authority has made necessary. That the new council should select "the best men available to fill the offices of medical officer of health, surveyor, and inspector of nuisances" seems very essential. It would be surprising if Wadebridge ratepayers did not resent the loss of the money which in the past has been given to the St. Columb Major rural district council under the name of "sanitary rate." Nevertheless, when they have the sanitary administration of the town in their own hands we may hope that they will not be found to grudge the expense of securing for their district that wholesomeness which at present it so conspicuously lacks.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Chesterfield Urban District.—This district, which possesses, according to a recent School Board census, a population

[1] London: Eyre and Spottiswoode, East Harding-street, E.C.; John Menzies and Co., Edinburgh and Glasgow; Hodges, Figgis, and Co., Dublin. 1898. Price 9*d.*

of 24,493, yielded during 1897 an infantile mortality of no less than 220 per 1000 births, a result due in the main to diarrhœal diseases. But this heavy death-toll has not been without its redeeming features, as it seems that the spirit of philanthropy has been instrumental in providing a lady adviser, as she may not inaptly be termed, whose duty it is to visit all houses in which births have taken place and there to give advice on infant feeding and on domestic hygiene. Dr. Meredith Richards, in referring to this matter, observes that while ignorance and foolishness are rampant there is little evidence of wilful neglect. There were 59 cases, with 10 deaths, of enteric fever during 1897, and although suspicion attached in one case to shellfish from Cleethorpes and in another to mussels Dr. Richards regards the pollution of the soil by privy-middens and personal infection as the most probable causes of this prevalence of the disease in Chesterfield. One case of enteric fever to which reference is made illustrates well what obvious limitations there must be to the information to be derived from notification. A patient presenting apparently some ill-defined symptoms developed general peritonitis, and on a post-mortem examination being made it was clear that the man in question had been suffering from enteric fever for some three weeks previously. He had been working up to within ten days of his death and he only took to his bed on the day preceding this event. Had this man not had perforation it is not improbable that the fact of his having suffered from enteric fever would have escaped notice. Surely in our etiological investigations we must leave a margin for the undiscovered and we must not allow ourselves to believe that a spot map of the notified cases tells us all the story. Another instance of the relative value of notification as it is at present carried out is furnished in Dr. Richards's report. Through the agency of the school attendance officer the medical officer of health was made aware of 64 absentees, and, on visiting these, 25 cases of scarlet fever were discovered. Probably but few of these cases would have been notified through the ordinary channels. We may refer, too, to certain cases of diphtheria as teaching a somewhat similar lesson. Two cases of this disease occurred among the infants attending a certain class in one of the schools. Dr. Richards forthwith examined the throats of all the children in this class; three children had slightly abnormal throats, but none of them complained of indisposition. As a result of bacteriological examination diphtheria bacilli were found in one of the throats, and the child being excluded from the class no further cases occurred. It would have been interesting could all the throats have been examined, as it is not unlikely that the bacillus would have been found in throats other than those presenting a slightly abnormal appearance. It is true, however, as Dr. Richards observes, that bacteriological examination is of the greatest value in circumstances such as these where children have been exposed to the risks of specific infection.

Cardiff Urban District.—Dr. Edward Walford has recently presented to his sanitary authority a concise report on the use of antiseptics in food, with reference more particularly to boric acid. After briefly discussing the powers conferred by the Sale of Food and Drugs Act and the difficulties encountered in its application, Dr. Walford points out that as much as from 15 to 30 grains of this drug may be consumed per diem by a bottle-fed baby if it is true, as is alleged, that a solution of 1 in 1000 of boric acid is required to keep milk sweet for forty hours; and this amount is, as he observes, much in excess of the maximum dose for infants. Dr. Walford also quotes Mr. C. E. Cassal, F.I.C., to the effect that an infant taking a quart of milk per diem may absorb as much as 28 grains of boric acid, and it is in connexion with infants that Dr. Walford sees the greatest risk from the use of antiseptics in food, the infant being as it were continuously dosed with by no means minute quantities of the preparation, whatever it may be. In the compilation of the report under notice much use has been made of "THE LANCET Special Commission on the Use of Antiseptics in Food," which appeared in our issue of Jan. 2nd, 1897; but the author has also addressed a circular letter to the medical officers of health and the clerks of the thirty-three large towns, with a view to ascertaining what action other sanitary authorities have taken. Out of ninety replies which Dr. Walford has received only three state that proceedings have been taken. Two convictions were obtained at Birmingham in cases where there were respectively no less than 60 and 65 grains of boric acid per gallon of milk, and the Monmouthshire and Glamorganshire County Councils have also instituted proceedings. As was shown in our Special Commission there is a scarcity of evidence as to the precise effects upon health of boric acid in food, but it is by no means unlikely that this absence of evidence is due in no small degree to the fact that the subject has not in the past received adequate attention; and it may be observed that according to the Select Committee of the House of Commons, which reported upon this subject in 1896, the sale of articles to which antiseptics have been added is prohibited in France, Germany, Italy, Spain, Brazil, and the Argentine Republic. Whether the example of these countries should or should not be followed in its entirety, there would appear to be a nearly unanimous opinion that when antiseptics are used the nature and amount of such substances should be distinctly set forth by the vendor and there should be little difficulty in carrying this opinion into effect. It appears to us that the Medical Department of the Local Government Board might usefully make this subject a matter for one of their scientific investigations.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns 6568 births and 4500 deaths were registered during the week ending Feb. 26th. The annual rate of mortality in these towns, which had been 20·7 and 20·4 per 1000 in the two preceding weeks, rose again last week to 20·9. In London the rate was 21·9 per 1000, while it averaged 20·3 in the thirty-two provincial towns. The lowest rates in these towns were 12·6 in Croydon, 12·9 in Derby, 14·5 in Bradford, and 15·8 in Oldham; the highest rates were 24·7 in Liverpool, 25·1 in Gateshead, 26·0 in Bolton, and 30·2 in Wolverhampton. The 4500 deaths included 504 which were referred to the principal zymotic diseases, against 497 and 464 in the two preceding weeks; of these, 217 resulted from measles, 112 from whooping-cough, 69 from diphtheria, 38 from "fever" (principally enteric), 34 from scarlet fever, and 34 from diarrhœa. No death from any of these diseases was recorded last week in Plymouth; in the other towns they caused the lowest death-rates in Portsmouth, Preston, Norwich, and Halifax, and the highest rates in Gateshead, Birkenhead, Bristol, and Leicester. The greatest mortality from measles occurred in London, Wolverhampton, Brighton, Birkenhead, Bristol, and Leicester; and from whooping-cough in Newcastle-upon-Tyne, Bolton and Gateshead. The mortality from scarlet fever and from "fever" showed no marked excess in any of the large towns. The 69 deaths from diphtheria included 46 in London, 5 in Cardiff, and 3 in Liverpool. No fatal case of small-pox was registered during last week either in London or in any other of the thirty-three large towns; and no small-pox patients were under treatment in any of the Metropolitan Asylum Hospitals. The number of scarlet fever patients in these hospitals and in the London Fever Hospital at the end of last week was 2674, against 2964, 2871, and 2781 on the three preceding Saturdays; 199 new cases were admitted during the week, against 209, 232, and 233 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had been 468 and 438 in the two preceding weeks, further declined to 416 last week, and were 124 below the corrected average. The causes of 52, or 1·6 per cent., of the deaths in the thirty-three towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Leicester, Bradford, Leeds, and in ten other smaller towns; the largest proportions of uncertified deaths were registered in Birmingham, Liverpool, Huddersfield, and Newcastle-upon-Tyne.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had increased in the four preceding weeks from 17·0 to 20·4 per 1000, further rose to 20·5 during the week ending Feb. 28th, but was slightly below the mean rate during the same period in the thirty-three large English towns. The rates in the eight Scotch towns ranged from 14·5 in Greenock and 17·4 in Dundee to 30·3 in Paisley and 37·4 in Perth. The 619 deaths in these towns included 20 which were referred to whooping-cough, 17 to diarrhœa, 16 to measles, 10 to scarlet fever, 6 to "fever," and 3 to diphtheria. In all, 72 deaths resulted from these principal zymotic diseases, against 72 and 90 in the two preceding weeks. These 72 deaths were equal to an annual rate of

2·4 per 1000, which slightly exceeded the mean rate last week from the same diseases in the thirty-three large English towns. The fatal cases of whooping-cough, which had been 21 and 25 in the two preceding weeks, declined to 20 last week, of which 11 occurred in Glasgow, 4 in Edinburgh, and 4 in Greenock. The 16 deaths referred to measles showed a slight further increase upon recent weekly numbers, and included 14 in Glasgow and 2 in Edinburgh. The fatal cases of scarlet fever, which had been 6 and 12 in the two preceding weeks, declined again to 10 last week, of which 7 occurred in Glasgow, and 2 in Perth. The 6 deaths referred to different forms of "fever" exceeded by 3 the number in the preceding week and included 5 in Glasgow; and of the 3 fatal cases of diphtheria 2 were recorded in Edinburgh. The deaths from diseases of the respiratory organs in these towns, which had been 126 and 91 in the two preceding weeks, rose again to 117 last week, but were less than half the number recorded in the corresponding period of last year. The causes of 34 or more than 5 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 34·9 and 28·5 per 1000 in the two preceding weeks, rose again to 31·2 during the week ending Feb. 28th. During the past eight weeks of the current quarter the death-rate in the city has averaged 31·5 per 1000, the rate during the same period being 22·1 in London and 18·3 in Edinburgh. The 209 deaths registered in Dublin during the week under notice showed an increase of 18 upon the number in the preceding week, and included 9 which were referred to the principal zymotic diseases, against 17 and 11 in the two preceding weeks; of these, 4 resulted from diphtheria, 4 from "fever," and 1 from diarrhœa, but not one either from small-pox, measles, scarlet fever, or whooping-cough. These 9 deaths were equal to an annual rate of 1·3 per 1000, the zymotic death-rate during the same period being 2·7 in London and 1·4 in Edinburgh. The fatal cases of diphtheria, which had been 2 and 1 in the two preceding weeks, rose again to 4 last week. The deaths referred to different forms of "fever," which had been 7 and 4 in the two preceding weeks, were again 4 last week. The 209 deaths registered in Dublin last week included 27 of infants under one year of age, and 73 of persons aged upwards of sixty years; the deaths of infants showed a slight further decline from those recorded in recent weeks, while those of elderly persons showed a considerable further increase. Eight inquest cases and 6 deaths from violence were registered; and 91, or more than a third, of the deaths occurred in public institutions. The causes of 10, or nearly 5 per cent., of the deaths in the city last week were not certified.

THE SERVICES.

NAVAL MEDICAL SERVICE.

THE under-mentioned Staff-Surgeons have been placed on the Retired List of their rank: Robert McIvor, M.D.R.U.I., and George Joseph Fogerty.

The following appointments are notified: Staff-Surgeon Vidal G. Thorpe to the *Northampton*. Surgeons: George T. Broatch to the *Wallaroo* and Edward H. M. Sherry to the *Royal Arthur*, additional.

ARMY MEDICAL STAFF.

Surgeon-Captain McFoley assumes Medical Charge of troops at Scarborough, vice Brigade-Surgeon H. Knaggs placed on sick list.

INDIA AND THE INDIAN MEDICAL SERVICES.

The services of Surgeon-Major Baker (Bombay), Residency Surgeon and *ex officio* Assistant to the Political Resident in Turkish Arabia, on furlough, are replaced at the disposal of the Government of Bombay. Surgeon-Major Magrath, A.M.S., is appointed to hold collateral charge of the Civil Surgeoncy at Sewebo, vice Surgeon-Major Lloyd, V.C. Surgeon-Lieutenant-Colonel Hormasji Masani (Bombay), has been permitted by the Secretary of State for India to retire from the service, subject to Her Majesty's approval.

VOLUNTEER CORPS.

Artillery: 4th Lancashire: Surgeon-Lieutenant J. C. M. Given, M.D. Lond., to be Surgeon-Captain. *Rifle:* 2nd Volunteer Battalion the Duke of Cornwall's Light Infantry: John Cawful Mackay, M.D. St. And., to be Surgeon-Lieutenant. 4th (Stirlingshire) Volunteer Battalion Princess Louise's (Argyll and Sutherland Highlanders): Surgeon-Major M. Benny, M.D. Edin., to be Surgeon-Lieutenant-Colonel.

THE HEALTH OF THE EUROPEAN TROOPS IN WESTERN AFRICA.

According to the Army Medical Report for 1896 the average strength of the non-commissioned officers and men serving in Western Africa was only 53, but there were 165 admissions to hospital, equal to a ratio of 3113·2 per 1000, which exceeds the corresponding rate in the previous year by 369·0. Of the admissions 102 were for remittent fever and 2 for dysentery. There were 3 deaths (including 2 invalids who died after leaving the command), 2 from remittent fever, and 1 from dysentery. The average strength of the officers was 26 and there were 63 cases of illness, including 39 of remittent fever, 3 of ague, and 4 of debility, the ratio, 2423·1 per 1000, being above that recorded for the preceding year by 152·8. There were no deaths, but 9 officers were invalided, 6 on account of remittent fever, 2 for debility, and 1 for boils.

THE DEBATE ON THE ARMY ESTIMATES.

Considering the times in which we are living and with the wars and rumours of wars which greet us daily in the newspapers it was not very opportune for Mr. Labouchere to back up his amendment to reduce the army by urging that the Government was asking for a war army in time of peace, although he coupled it with an expression of his opinion that their policy of expanding the empire was leading to conscription. Whatever may be the case as regards the fighting part of the army members of the medical services have everywhere been pretty fully occupied of late and the sooner an accession is made to their strength the better.

The epidemic of measles on board the cadet training ship *Britannia* at Dartmouth still continues. Three shore hospitals have been established.

Correspondence.

"Audi alteram partem."

"TRANSMISSION OF SYPHILIS TO THE THIRD GENERATION."

To the Editors of THE LANCET.

SIRS,—I quite agree with Dr. Shaw-Mackenzie (*vide* THE LANCET, Jan. 29th) that "Fergusson's theory to be fully appreciated should be read in its entirety," but I cannot acquiesce in his opinion that Fergusson's observations are in any way "conclusive." On the contrary, it seems to me that Fergusson, so far from proving that the attenuation of syphilis in Portugal was due to the hereditary transmission of immunity, has not even proved that such attenuation existed. His assertion that syphilis in Portugal had become exhausted rests upon two points of personal observation:

1. *That the disease in its primary state is curable in Portugal without mercury.* It is hardly necessary to remark that it is the internal administration of mercury that is meant here. Such a statement, made at a time when no distinction was drawn between soft and hard sores, must be valueless. It is well known that even syphilitic primary lesions heal without the use of mercury, and Fergusson by an indiscriminate use of mercury debarred himself from observing the natural course of the disease. From his own words, moreover, it is clear that the malignancy which the primary lesion in Portugal exhibited in the Portuguese as well as in the British was due to phagedæna. The ulcers that made him "shudder to look at" frequently resulted in the "most melancholy of all mutilations." That phagedæna was curable in the Portuguese without mercury is not surprising; that it was not so in the British is a mere

surmise of Fergusson. He says: "I need scarcely say that this new organisation of disease in the stranger cannot be combated by such means as the natives employ to cure themselves. They would be utterly insignificant and ..... mercury offers the only chance of salvation." This "*new*" organisation does not differ from the "old" one in the nature of the primary lesion. But that the ordinary —i.e., non-mercurial—means "would be" insignificant in the British soldier is a mere conjecture. Every English soldier had to be treated by his regimental surgeon, who in his turn had to carry out Fergusson's "general order enjoining the use of mercury" in cases of venereal sores whether syphilitic or not. Therefore the course which these malignant sores would have taken in the British soldier without mercury must necessarily remain unknown. Where the indiscriminate use of mercury is made compulsory conclusions as to its curative effect are impossible. Only one case is given in detail of a British soldier affected with a chancre which was contracted in Portugal. It clearly shows to what extent his interpretation of cases was biassed, not only by the erroneous opinions of his time, but by his own preconceived ideas. An officer has "four days after connexion the whole penis enormously swelled, of a deep red colour, malignant ugly chancres on *different* parts of the prepuce and *two* on the glans penis, the appearance of which I can compare to nothing but the holes made by a rusty nail in a piece of mahogany or logwood. The catastrophe if left to nature, ere mercury was in fact at hand, or a few doses of bark, wine, and opium *would have* inevitably sealed his fate; but I caused him to be copiously blooded, applied the coldest acetous lotions to the part, purged him most freely with neutral salts, and enjoined every part of the antiphlogistic regimen ..... in a few days all the sores were in a state of the healthiest suppuration." This patient evidently suffered from soft, multiple, phagedænic sores appearing four days after connexion. He had not syphilis—as far as the history of the case goes—and the administration of mercury which was dictated by "the patient's fears" and Fergusson's "responsibility" was unnecessary. Fergusson being a staunch believer in the all-conquering power of mercury in all sorts of venereal sores was prevented from making the experience which the Portuguese surgeons probably had made already—viz., that many venereal sores heal quite as well, if not better, without mercury. Fergusson's indignation about some medical officers belonging to the "German regiments of our service" who "pertinaciously, even officially, refused to prescribe mercury, asserting that it was not necessary to the cure," contains a strong element of the humorous. "Such alarming conduct, as being referable only to the most brutal ignorance, of course met with no quarter." If this attempt at insubordination was made in the treatment of chancres, as in all probability it was—in particular of such chancres as the one described above—there is method in this "most brutal ignorance" from which I am afraid the German medical men of to-day have not yet emerged and into which most of *us* have relapsed. At the time when I studied at the Universities of Würzburg and Vienna German medicine had in many respects grown out of this state of savagery. Still, most surgeons, and that in districts like Vienna where syphilis was not in a dying condition, would have refused "pertinaciously, even officially," to give mercury in the case of a chancre unless it was indurated and accompanied by indolent hard glands, and even in these latter cases the overwhelming majority of them would have waited for the appearance of general symptoms before the internal administration of mercury. On this latter point difference of opinion still exists, but in cases like that of the officer which has been given above—and it is to such cases that Fergusson's observations chiefly refer—most men would, then as now, have been guilty of the "alarming conduct" which Fergusson describes, even to disobeying their senior officer and incurring the risk of martial law. Altogether the utterances of this meritorious military surgeon are more remarkable for military determination than for medical discrimination. Still more remarkable is the pathological conclusion which he draws from this "brutal ignorance" and about which he has "no doubt"—viz., that in the "districts where they (these German surgeons) were bred, the disease ..... had become as weak as the syphilis of Portugal, and their experience had never opened to them a more extensive field." Argumentation of this kind is out of reach of reasonable discussion. "Another fact," Fergusson continues, "which at the time I could not comprehend, would appear to corroborate this. The venereal disease in some districts of the Russian Empire prevails to a shocking degree amongst the peasantry. ..... It happened to me to visit ..... Moscow ..... when the Prince Gallitzin was choosing a surgeon to an hospital ..... for syphilitic patients. The contest ran high between the advocates for, and opposers of, mercury." All I can gather from this communication is that the "contest between the advocates for and opposers of mercury" may "run high"—i.e., that the same so-called ignorance may exist where "venereal disease prevails to a shocking degree" and that therefore the conclusion drawn from that "ignorance" in German surgeons on the attenuation of syphilis in certain districts of Germany is reduced *ad absurdum* by Fergusson himself. I may add that no such self-exhaustion of syphilis has ever been observed in any part of Germany as far as I have been able to ascertain from reliable sources. The second piece of observation upon which Fergusson's statement rests is:

2. *That the anti-syphilitic woods, combined with sudorifics, are an adequate remedy for constitutional symptoms, the quantity of mercury being always insignificant and often altogether omitted.* Apart from bone affections, in which the Portuguese also gave mercury, the only constitutional symptom to which this observation of Fergusson relates is the throat affection, and we are told that the Portuguese "attack it topically with mercurial apozems or stimulating mercurial gargles." The throat affections referred to by Fergusson are those by which the "disease shows itself when the constitution is tainted"—i.e., secondary symptoms which, like all secondaries, are characterised by a tendency to spontaneous resolution. That they will disappear under local mercurial applications combined with anti-syphilitic woods and sudorifics and that they frequently disappear without any treatment and within a remarkably short time is an observation so frequently made everywhere, and so often corroborated by the most confirmed mercurialists, that it cannot be adduced as a characteristic feature of attenuated syphilis. With regard to bone lesions we are told that "dreadful examples of exfoliations and loss of parts sometimes occur," but that they "by no means constitute a large proportion of the affected"—a somewhat vague statement. But all estimates as to the frequency of tertiary symptoms must be fallacious, unless the distinction between syphilitic and other sores is clearly drawn. To this it may be objected that as the distinction was not made with regard to the English, the relative scarcity of tertiaries in the Portuguese compared with the frequency of venereal sores has still to be accounted for. But the relative scarcity—in itself badly enough established—is easily explained by the prevalence of soft, in particular of phagedænic soft sores, amongst the Portuguese. For the correctness of this explanation Fergusson's own declarations furnish ample proof.

I therefore maintain that the observation that phagedænic soft chancres which Fergusson was in the habit of "curing" by mercury could be cured without this drug—that this observation was misinterpreted by him as *attenuation* of syphilis while the proper conclusion would have been that there are many venereal sores which require no treatment by mercury and are not followed by general symptoms. If Fergusson's observations do not prove that syphilis in his time existed in Portugal in an attenuated form it is idle to discuss whether this would-be attenuation has to be explained by hereditary immunity or by "other causes," of which Fergusson admits at least three—viz., "respective organisation," which he "allows to be good as far as it goes," "climate," and "mode of life," which latter, as regards the English is always "incautious and frequently intemperate." In this respect I have nothing to add to what I have already said in the third part of my paper on the "Transmission of Syphilis to the Third Generation"—viz., that the hereditary transmission of syphilitic immunity is a remote possibility and that the attenuation of syphilis, whenever it takes place, is effected by the improvement in hygienic, preventive, and therapeutic measures. In the same way the so-called malignancy of syphilis amongst the poor Russian Jews has to be attributed rather to the misery and insanitary conditions in which they live than to the "virginity of the soil." This latter explanation is given by Epstein; it is rejected by Neisser, and *not* adopted by him as Dr. Shaw-Mackenzie seems to believe. Lesser, recently referring to a further example of endemic syphilis (in the Marshall Islands), remarks that in endemic syphilis sexual intercourse plays only a subordinate part as the means of propagation, that in fact syphilis ceases to be

a sexual disease. But this only happens in isolated, secluded, and uncivilised parts of the world. With the growth and spread of civilisation the frequency of extra-genital infection declines. The attenuation of syphilis is well accounted for in the words of Joh. Benedictus: "Ratio est in promptu, quia homines nunc sibi melius cavent ab infectis, vel quia medici docti melius cognoscunt nunc causam morbi, et melius applicant remedia quam tempore anteacto."

I am, Sirs, yours faithfully,

Welbeck-street, W., Feb. 7th, 1898. GEORGE OGILVIE.

"CHARGES TO PATIENTS IN ISOLATION HOSPITALS."

To the Editors of THE LANCET.

SIRS,—Your annotation in THE LANCET of Feb. 26th criticising my paper on "Charges to Patients in Isolation Hospitals" is to me most interesting and novel. At a time like this when there are very few local authorities who do not reckon an isolation hospital as one of their assets it is of the highest importance that this question should be thoroughly thrashed out. May I therefore add a little to my side of the case? My statement that the isolation hospital is the property of the ratepayers is termed "misleading." I confess that I am at a loss to see how this can be so, broadly speaking, for in a short time the ratepayers of this borough will probably be called upon to pay a rate of threepence in the pound according to the rateable value of their dwelling-houses, &c., for isolation hospital purposes. About one penny of this rate will pay off a portion of the principal and interest on money borrowed for the erection of the hospital and twopence will go to pay the current expenses of maintenance of the nursing staff, patients, &c. For a period of thirty years the ratepayers will go on paying their penny in the pound and for as long as the hospital lasts—providing the law remains the same—they will continue to maintain the staff, &c. On these counts I maintain that, broadly speaking always, the isolation hospital is quite as much the property of the ratepayers as are the public parks, public buildings, streets, sewers, and so on. I am one of those who think that it encourages a healthy public spirit to let the public know that such things are their property.

A much more serious statement on the part of your critic, however, is that the public should prove fitness for admission to such hospitals and especially their inability to secure isolation at home. Plainly and shortly I regard this as an inversion of the best way of looking at this question. The cases in which isolation at home can be carried out are extremely few — very much fewer than those who have not had experience of attempts to carry it out would perhaps credit. Even when it is apparently being carried out with every rigour and precaution there is always the danger of some emergency—nay, some domestic triviality even—occurring which undoes in a few moments the efforts of many weeks. I cannot call to mind more than one or two cases in an experience of about six years where even in large houses I could honestly say that efficient isolation had been carried out. The *inability* to secure isolation at home, to me at least, therefore would require but little proof, but experience has taught me to demand detailed and practical proof of the ability to provide and maintain it.

The whole question under discussion turns on this—that the individual is removed to an isolation hospital much more for the good of his immediate neighbours and of the community at large than for his own personal good. He is "unclean," and therefore for the good of the community, "He shall dwell alone; without the camp shall his habitation be."

In conclusion I would like to point out that though there may be a very remote possibility of this procedure I am advocating leading a few degenerate individuals into a state of demoralisation and encouraging pauperism there is another side even to that. As Professor Wynter Blyth pointed out in his address to the Sanitary Institute Congress in 1896, many individuals who have been well and properly treated in isolation hospitals would probably, if treated or allowed to remain in their homes, have been added to the chronic invalids of the population and would drift gradually into poverty and then into pauperism. Is it not better to pay a few pence more for the maintenance of an isolation hospital and keep up the health and working capital of our country than to pay those same few pence for the maintenance of the useless "flotsam and jetsam" population of our workhouses? I apologise for the length of my letter, offering as my only excuse the great importance of the subject. I hope some others of your readers will give us their ideas. Thanking you in anticipation for your insertion of my letter,

I am, Sirs, yours faithfully,

MEREDITH YOUNG, M.D. Edin., D.P.H. Vict.

Crewe, March 1st, 1898.

*** We are happy to print Dr. Meredith Young's letter, but we remain of our former opinion. A ratepayer cannot (to reduce the matter to a logical absurdity) elect to take his meals whenever he likes in the workhouse.—ED. L.

THE DUTIES OF THE PRESIDENT OF THE GENERAL MEDICAL COUNCIL.

To the Editors of THE LANCET.

SIRS,—I find that some misunderstanding prevails in reference to Mr. Carter's statements that the President of the General Medical Council ought not to have been approached by myself (since Dec. 22nd, 1897) on questions affecting the business of the General Medical Council and that he is disabled by illness from attending to the same. Permit me to point out that these statements are contrary to the fact.

In the first place, as regards the President's inability to deal with matters laid before him, it is the fact that he retains the business of the Council in his hands, that the Registrar takes his instructions from him, and that quite lately, in response to a request that he would summon a committee appointed to recover if possible certain moneys due to the Council and wrongfully impounded by the police, he (the President) wrote me under date Feb. 15th, 1898, a letter couched in forcible and undesirable terms. The profession must clearly understand that so long as a President of the General Medical Council retains office the sole power of convening certain committees and dealing with urgent business rests with him and him only. That I have been obliged to apply to him for these objects is the inexorable effect of the Standing Orders and his retention of office. If Mr. Carter's statement were true, then to prevent the public business of the Council stagnating for six months it would of course be necessary for the President to resign an office the duties of which he could not fulfil.

I am, Sirs, yours faithfully,

Cavendish-square, Feb. 28th, 1898. VICTOR HORSLEY.

THE UNIVERSITY OF LONDON COMMISSION BILL.

To the Editors of THE LANCET.

SIRS,—I shall be extremely obliged if you will publish the annexed copy of resolution of the Court of Assistants in THE LANCET and which has not been previously forwarded for the following reasons: the omission of the Society from the Senate has come as a surprise, the Lord President having intimated that he would fully consider the question, and it being generally understood that the Royal Colleges and the main body of medical teachers throughout the metropolis are favourable to their inclusion.

I am, Sirs, yours faithfully,

March 1st, 1898. JAMES R. UPTON.

Resolution passed at a Court of Assistants of the Society of Apothecaries held on Feb. 8th, 1898:—

That the Society of Apothecaries of London having considered the provisions of the London University Commission Bill of 1897 are of opinion that the omission of the Society from the Senate of the proposed University, thereby taking away the place assigned to the Society by the report of the Cowper Commission, is eminently unsatisfactory and that the Bill unless amended in this respect will fail to meet the requirements of medical education in London.

"THE REGISTRATION OF MIDWIVES BILL."

To the Editors of THE LANCET.

SIRS,—Although I am of opinion that legislation is necessary to protect the poor from the results of ignorance on the part of midwives, yet I think the present Bill should be stoutly opposed and for the following reasons:—1. Because

it will not prevent unregistered women from acting in the capacity of midwives. 2. Because it does not prohibit midwives registered under the Act from assuming the title of Licentiate in Midwifery. 3. Because the proposed constitution of the Midwives Board is objectionable from every practitioner's point of view—that is to say, it will be a body with the constitution of which the general practitioners of this country will have no voice. We cannot for one moment allow the two Royal Colleges and the Society of Apothecaries to exercise powers of nomination, neither can we see the necessity of giving so much representation to the Privy Council. 4. Because the provision made for the local supervision of midwives is impracticable. How in the name of common-sense is a medical officer of health of a large town to exercise supervision over all midwives practising in it?

It is clearly manifest that if we are to oppose this Bill we must without delay, both individually and collectively, appeal to our representatives in Parliament. And, further, I think we should take opportunities of making known our views in the lay press. I am, Sirs, yours faithfully,

Cardiff, Feb. 26th, 1898. T. GARRETT HORDER.

To the Editors of THE LANCET.

SIRS,—Without any desire to cavil with Mr. Humphreys there is one expression in his letter to which I beg to take exception. It runs thus: "Is it not, however, for those who disagree with its provisions to put their views clearly before Parliament and to leave the question to its decision rather than to incur the responsibility of causing further delay in a matter in which delay means the sacrifice of many lives and exposure to much unnecessary suffering?" Now, Sirs, at the outside the scheme of registration is clearly an experimental process and Mr. Humphreys is begging the whole question by stating that the delay implies the sacrifice of lives as there is not a particle of evidence in support of such a statement. It is no doubt the fact that a melancholy death takes place occasionally in the hands of an untrained midwife, but that these are exceedingly rare every practical man knows, and it is surely difficult to conceive how any Parliamentary measure, however skilfully tinkered up, which revolutionises obstetric practice by offering a premium on quackery can in the long run compensate for the loss of a life here and there under the present system; and, indeed, if there is any assumption with regard to the delay of legislation, to my way of thinking, it is on the score of the longer the delay the better.

I am, Sirs, yours faithfully,

Peckham, Feb. 26th, 1898. CLEMENT H. SEBS.

'NOSTRUMS."

To the Editors of THE LANCET.

SIRS, While such differences of opinion are held by distinguished members of the medical profession anxious to promote the best interests of the profession as to the meaning of the present Medical Act there can be but little hope of getting a new Medical Act passed. It will surely take an absolute unanimity of object and opinion in our profession to bring about such a result. Both the disputants, however, are agreed that the sale of "nostrums" and patent medicines as at present permitted is a gross evil; with this opinion every medical man in the kingdom will agree, so that upon this subject at least we have unanimity. Is it not possible, therefore, to bring pressure to bear upon the Legislature to deal with this question?

I had the pleasure when addressing the students at St. Mary's Hospital in 1896 of dealing with this subject. In proposing a vote of thanks Sir William Broadbent suggested as a partial remedy that each nostrum should have printed upon the bottle the ingredients and the exact quantities of the drugs. May I make a suggestion—viz., that the Presidents of all the medical corporations and societies should in the name of their respective bodies approach the Board of Trade as a deputation urging such remedies for the existing state of things as they in their wisdom may arrive at after deliberate consultation?

I am, Sirs, your obedient servant,

Feb. 27th, 1898. MORTON SMALE.

P.S.—I will with pleasure send a copy of my address to anybody who would care to have it.

"DEATHS WITHOUT OBVIOUS CAUSES."

To the Editors of THE LANCET.

SIRS,—In THE LANCET of Feb. 19th you published an annotation bearing the above title. I met with such a case a short time ago. A woman, aged forty-five years, was admitted to the Belfast Royal Hospital on Feb. 5th suffering from a varicose ulcer on the left leg just above the ankle. The ulcer was progressing favourably under treatment, but on the 13th the patient suddenly felt an attack of slight dyspnœa with pain at the heart; this lasted for about thirty seconds when she expressed herself as feeling quite well; in ten minutes she was again seized with the same symptoms and died inside a minute. On a most careful post-mortem examination made by Dr. Lorrain Smith, lecturer on pathology, Queen's College, Belfast, no cause for death could be discovered. There were no signs of phlebitis nor could any traces of clot in the pulmonary vessels be found and all the organs were in a healthy condition. During the week the patient was in hospital she appeared to be a very healthy woman and she was kept at absolute rest in bed till she died.—I am, Sirs, yours faithfully,

ALEX. MONTGOMERY, M.B. R.U.I.,

Feb. 28th, 1898. Resident Surgeon Belfast Royal Hospital.

TOTAL ABSTINENCE IN ASYLUMS.

To the Editors of THE LANCET.

SIRS,—The annual meeting of German alienists took place last September in Hanover and I beg leave to call the attention of THE LANCET to two subjects which cannot fail to interest the English medical profession.

1. This meeting after an exhaustive discourse by Professor Jolly, of Berlin, and on the motion of the learned professor, passed unanimously a resolution directed principally against a criticism contrary to facts on the part of the Reichstag in January, 1897, having reference to the actual condition of German asylums. This resolution is as follows: "This meeting concurs in the proposal adopted at the sitting of the Reichstag for regulating in conformity with the laws of the empire the supervision of lunatic asylums. But this meeting considers it a duty to point out once more that the most important reform consists in the establishment of independent boards of supervision directly subordinate to the minister and at the head of which stands a specialist occupying that post at headquarters."

2. The subject of alcohol in lunatic asylums was exhaustively discussed by Professor Hoppe, of Allenberg, who concluded his discourse by expressing the opinion that alcohol should not only be kept out of the reach of drunkards by establishing in asylums a so-called drunkards' department but should be kept altogether out of asylums, milk or lemonade being substituted for it. "If alcoholists," contended Professor Hoppe, "were not to be allowed to have alcohol then the other patients should also not be allowed to have it, as otherwise it would be impossible to make alcoholists practise total abstinence."

The greater portion of the alienists present were in favour of Professor Hoppe's views; and some of these alienists, amongst others Professor Forel, of Burghoelzli, and Professor Mocli, of Berlin, have already introduced the system of total abstinence into the respective asylums of which they are the medical superintendents.

I am, Sirs, yours faithfully,

Villach, Feb. 24th, 1898. DIRECTOR SCHLANGENHAUSEN.

THE TREATMENT OF BURNS AND OTHER SURFACE WOUNDS.

To the Editors of THE LANCET,

SIRS,—The surface wounds of a lower animal, such as a dog, heal as a rule very much better than those of a man, particularly when the former has not and the latter has the advantage of experienced surgical aid. I do not know that a dog has a like advantage as regards deep wounds such as those caused by a bullet, a lance, or a sword. Certainly I think that a man deeply wounded and tended by a surgeon has a better chance of speedy recovery than a dog with a similar wound that receives no skilled aid; but not so in

the case of superficial wounds. As regards deep wounds, even if the man receives no skilled aid and if his tissues have not been poisoned by alcohol, he yet recovers as quickly as the dog, as witness Turks and Afridis wounded on the battlefield. Apparently, therefore, the human being is not less capable of speedy recovery than the brute. Why, then, his slow convalescence from superficial wounds? I think the explanation is to be sought in the mistaken efforts of the surgeon.

When a dog receives a superficial wound—such as a burn or a scald—he merely licks and keeps it clean; when a surgeon has charge of a man similarly hurt he places on it a variety of surgical dressings. But if we insert a piece of the best of surgical dressings under the skin violent inflammation ensues. Usually we have suppuration, which continues till the foreign body is voided in the discharges. At the best inflammation leads to encystment. But when the skin is destroyed, as in the case of a burn, to these very subcutaneous or subcuticular tissues, which are so intolerant of foreign bodies, we are in the habit of applying foreign bodies—i.e., surgical dressings. Surely no more unscientific procedure can well be conceived. Is it not evident that in this particular the dog is our superior in surgical science and that, like him, we should strive to keep the wounds under our care free from foreign bodies—discharges, bacteria, surgical dressings, &c.? Is it not abundantly evident that when superficial wounds heal in man, particularly civilised man, they do so not in consequence of but in spite of the aid given him by helpers, professional or otherwise?

In view of these considerations I venture to place before the profession a method of treating surface wounds so simple and obvious that I think it must have been tried before, though I cannot lay hands on any authority. It is possible, however, since I have found this method highly successful, that it is not in general use because some small but essential details may formerly have been omitted. At most it is but a modification of the "open" system. Briefly, I do not place the surgical dressings on the wound but on a light wire cage or support, which thus, while permitting them to afford protection, prevent them acting as foreign bodies. The wire support is easily manufactured. If the wound be on a flat surface—as on the chest—a stout wire of suitable length is bent into such a shape that when placed over the wound it surrounds the latter but rests everywhere on uninjured tissue. On this wire as basis is woven a wide network of lighter wire, so that a shallow dish of wirework shaped somewhat like the wound, but larger, results. If the wound be on a limb a cylinder of similar wirework is made in two longitudinal parts, which are hinged together, so that the cylinder may be easily applied to, or removed from, the limb. The circumference of the shallow dish and the ends of the cylinder are padded by wrapping some soft material—carbolised wool, for instance—round the thick supporting wire. When in place the apparatus may be covered by any dressings the surgeon chooses and it is retained in place by strapping or bandages.

On one detail of the treatment it is necessary to insist with the utmost emphasis, the surface of the wound *must* be kept absolutely clean. It should be gently sponged daily, twice, thrice, or oftener if necessary, with some mild antiseptic fluid such as boracic or weak (1 in 40) carbolic lotion. Otherwise the discharges, coagulating on the surface, form a cake under which pus is retained and which proves in experience more hurtful than any other foreign body. In order as much as possible to prevent the discharges drying and so caking I usually cover the supporting cage with wet lint and the whole with waterproof. If in spite of precautions the lymph does cake it may be softened by soaking in olive oil and then removed.

The advantages claimed for the above method are the following. 1. It is rational, whereas the methods generally in use are pre-eminently irrational. Hitherto our advance in surgical procedure has been in the direction of substituting for irritating applications others less irritating but still harmful. For example, we have substituted antiseptic for septic dressings and one surgeon has for ordinary antiseptic applications substituted metal plates. The present method seeks to abolish altogether the use of foreign bodies as *applications* while retaining them for purposes of protection. 2. The apparatus is very easily made, as may be proved by any one possessed of sufficient wire and a pair of pliers. It is, moreover, easily sterilised by boiling or immersion in an antiseptic fluid. 3. The wound is very quickly, easily, and painlessly dressed. No longer has the wretched patient—and the attendant—to endure the agony accompanying the recurrent stripping of adherent dressings from an inflamed and exquisitely sensitive surface, as, for example, a large burn. 4. The dressing requires no particular skill and therefore this method is especially suitable to the poor when suffering, for example, from varicose ulcers. 5. Wounds heal with a quickness as delightful to the surgeon as to the patient. No longer do superabundant granulations arise; deep ulcers rapidly fill up to the level of the skin; the whole surface takes on a healthy aspect in preparation for the zone of young skin which advances uninterruptedly from all sides till the process is complete; no longer do healed surfaces "break down" as is so commonly the case when dressings are applied directly to the surface; and seldom, so far as I have been able to observe, do thick cicatrices occur, the contraction of which is so frequent a cause of deformity. These thick cicatrices result from the formation of fibrous tissue due, doubtless, in severe cases partly to considerable tissue destruction but more generally to the mere irritation induced by the presence of foreign bodies. They do not occur in deep wounds when there is no great tissue destruction and from which collections of pus and other foreign bodies are from the first absent; and they rarely, if ever, follow the surface wounds of animals, which I have seen of huge size abroad (e.g., the saddle-galls of horses). I take it, in fact, that the formation under dressings of a thick layer of fibrous tissue, or of tissue which subsequently becomes fibrous, is a process of the same order as that by which a foreign substance within the body becomes encysted and is thus separated by a tissue more resistant from others less resistant. 6. The method is almost ideally aseptic. It must be remembered that the bacteria of putrefaction have their habitat not in healthy tissues but in dead organic matter. The living tissues are germicidal. The present method aims at the quick and effectual removal of the nidus; under methods ordinarily pursued the discharges are banked up on the wounds for varying periods and are made antiseptic by poisons which, since they are inimical to the life of the bacteria, must generally be inimical to the life of the tissues. 7. Lastly, the whole treatment is very much less disagreeable than ordinary methods to the patient. The sufferer no longer feels a gradually increasing sensation of heat, pain, and discomfort as the discharges accumulate beneath the sopping dressings, nor does he behold the nauseating mess usually found when the dressings are removed. In the absence of irritation little pus is formed and the exudation is mainly serous.

I have made high claims for this "cage" method of treating surface wounds. But I shall be only too glad if surgeons will submit it to the severest tests possible. Let them, for instance, treat thus old and foul varicose ulcers which have defied all other methods of treatment or wounds which have repeatedly broken down. Or let them cover the whole of a wound with such an apparatus as I have described, but under the cage on part of the wounded surface let ordinary surgical dressings be placed. Then let the difference of behaviour between that portion of the wound which is in contact with an irritating foreign body (i.e. the surgical dressing) and that portion which is not so affected be observed. Even when small the portion covered by dressings will be the last to heal. Or let vaccination vesicles, which are ordinarily treated in accordance with rational principles without dressings, be covered with "protective," the commonest of surgical dressings. The surgeon will receive an instructive object lesson as I did on an occasion when I unwittingly performed an unhappy experiment. I vaccinated a man who was about to enter one of the public services. He subsequently complained that the vesicles interfered with his work, and, thoughtlessly, I covered them with protective, whereupon the surrounding area underwent severe inflammation.

If the above experiments be tried I think surgeons will come to the conclusion that surgical dressings when applied to wounded surfaces are anachronisms, relics of barbarous times when even more pernicious dirt—i.e., matter in the wrong place—was applied to such surfaces. We now strive to remove foreign bodies from deep wounds; we should strive to remove them from surface wounds also. Messrs. Allen and Hanburys, of Plough-court, Lombard-street, will keep a stock of surgical cages, and will manufacture them to order.

I am, Sirs, yours faithfully,

Southsea, Feb. 17th, 1898. G. ARCHDALL REID.

DR. WILLIAM PLAYFAIR'S RETIREMENT FROM KING'S COLLEGE.

To the Editors of THE LANCET.

SIRS,—Although it is not a question of any moment perhaps you will allow me to say that I am not retiring from King's College on account of the age limit as you state—I should have nearly four years to run to reach that—but because, having completed a quarter of a century's service as Professor of Obstetrics, I think it is now high time to make way for others.

I am, Sirs, yours faithfully,

Grosvenor-street, W., Feb. 26th. W. S. PLAYFAIR.

THE ADMINISTRATION OF ANÆSTHETICS.

To the Editors of THE LANCET.

SIRS,—Dr. Hewitt in his lecture published in your issue of Feb. 19th refers to the danger of the muscular spasm which frequently characterises the second stage of chloroform anæsthesia. I have for many years asserted and frequently demonstrated that a free dose of ether with the chloroform just previously to this period almost invariably prevents this spasm and so removes the most frequent source of danger. Such a remedy appears too simple to gain a hearing with specialists in anæsthetics, but so fully persuaded am I of the value of a dose of ether at this particular period that I do not allow chloroform to be given for me without it, and I should be very pleased if a gentleman with Dr. Hewitt's opportunities and experience could be found to test the value of the practice. I am, Sirs, yours faithfully,

Liverpool, Feb. 26th, 1898. F. T. PAUL.

"DOSAGE IN ANÆSTHETICS."

To the Editors of THE LANCET.

SIRS,—I shall not take up your valuable space with a controversial letter upon the above question, which was discussed at the meeting of the Society of Anæsthetists on Feb. 17th, but simply state facts. I have administered chloroform by the "open method" or, to use the more expressive if less correct term of Professor Waller—viz., the "slapdash method"—in over 740 cases without a fatality. I may say the ages of the patients varied from one week to eighty-seven years. Might I add that all forms of heart mischief were mingled with these cases, from congenital to advanced aostic. If the attention be fixed upon the patient rather than upon the inhaler, and if we recognise that there is an equal responsibility in administering an anæsthetic for a simple operation as for a prolonged operation, then we might hope for a diminution in the number of deaths from anæsthetics. I am, Sirs, yours faithfully,

Bedford General Infirmary, Feb. 28th, 1898. S. J. ROSS.

THE USE OF A SPLINT AFTER REMOVAL OF THE BREAST.

To the Editors of THE LANCET.

SIRS,—In THE LANCET of Feb. 5th is described a splint used by Mr. Edward Cotterell after removal of the breast to prevent the usual stiffness and discomfort which ensues if the arm is bandaged to the side in the usual way. It may interest some of your surgical readers to know that the same result can be obtained without the use of any special apparatus. I saw the notice of the use of a rectangular splint by Mr. Cotterell in the report of the November meeting of the Medical Society of London, and as I had to operate for carcinoma mammæ a few days later it struck me that no splint was necessary. I therefore bandaged the breast with a many-tailed bandage, but kept the arm at right angles to the body and let it lie on a pillow encircled with a broad sling made from a pillow-case, the two ends being fastened by a strong safety-pin to the head of the bed. The result was all that could be desired; the wound healed by first intention and the patient was able to do her hair at the end of a fortnight. I have used the same method in two cases since then with equally satisfactory results. In all three cases the axilla was cleared out, but none of the pectoralis major was removed. The only difference in bandaging the breast was that the axilla was well padded with dressings and the shoulder-strap of the bandage was brought under the axilla of the side operated on and pinned to the bandage behind the opposite shoulder.—I remain, Sirs, yours faithfully,

PRIESTLEY LEECH, M.D. Lond., F.R.C.S. Eng.,
Honorary Surgeon to the Royal Halifax Infirmary.

Halifax, Feb. 24th, 1898.

AN EXPLANATION FORTHCOMING.

To the Editors of THE LANCET.

SIRS,—"V. M. S.," in the letter headed "An Explanation Required," published in THE LANCET of Feb. 26th, p. 607, is hardly correct in his statement that volunteer medical officers received different treatment from that of combatant officers in the matter of the Jubilee medal. Only commanders of units received the medal, which of course meant that the bulk of the officers did not receive it. A bearer company was considered as the medical unit, and the officers in command of each did receive the medal. The medal given to the St. John Ambulance Association is the bronze medal similar to that given to the police and a very different thing altogether. I am, Sirs, yours faithfully,

Feb. 26th, 1898. V. M.

To the Editors of THE LANCET.

SIRS,—I am glad to see that you have inserted a letter in THE LANCET of Feb. 26th on the subject of the absolute exclusion of the officers of the Volunteer Medical Staff from all participation in the distribution of the Queen's Jubilee Medal. I suspect the chief grounds upon which this apparent slight to medical officers of volunteers is determined arises from the fact that few if any of us (outside the Volunteer Medical Staff Corps) happened on Jubilee Day to be in actual command of an "unit." My own case will perhaps serve as an illustration. I was ordered to act as the senior medical officer of my brigade, which was made up of companies from each battalion comprised in it. The captains commanding the separate companies in some instances received the medal, but notwithstanding that in addition to being in medical charge I had the stretcher sections of the various battalions under my command my application for the medal was refused. On the other hand, the chief staff officers of the brigade on duty were granted it. A few weeks later in the season these various regimental stretcher bearers were formed into a "bearer company" and as such I commanded them at Aldershot. It appears that had I held such a command on Jubilee Day I should have received the medal, a bearer company being considered an "unit." The duties I performed and the command I exercised were practically identical on each of these occasions, but a slight technical difference obtained in that on Jubilee Day I commanded a group of separate stretcher sections, whereas at Aldershot the same were formed into and termed a "bearer company." The reception of the medal would have been a gracious and welcome recognition, in my case, of more than thirty years' service passed in the Volunteers.

I am, Sirs, yours faithfully,

A SURGEON-LIEUTENANT-COLONEL HOLDING THE V.D.

Feb. 26th, 1898.

LIVERPOOL EYE AND EAR INFIRMARY.—The annual report of this infirmary stated that in the out-patient department the new eye cases numbered 6403 and the new ear cases 2190. The number of minor operations performed on out-patients was 1098; 815 patients have occupied beds, as against 765 during the previous year, the number of important operations on this class of patients being 601, as against 549 in 1896. The financial condition as regards the subscription list is still unsatisfactory, but on the other hand the amount received from donations and legacies was above the average and the treasurer reported a credit balance of £112. The mortgage debt on the building remains at £1000. The contributions from the Hospital Saturday and Sunday Funds amounted to £456. Mr. Richard Hobson has offered to contribute £100 towards the extinction of the mortgage debt provided an effort were made within six months to obtain the remainder of the money.

HOSPITAL ABUSE.

(BY OUR SPECIAL COMMISSIONER.)

XIV.—GLASGOW.[1]

Reduction of the Death-rate and Increase of Hospital Accommodation. — A Threefold Increase of Hospital Patients.—Charity Hospitals and Municipal Hospitals.—Sixpenny Doctors. — Gross Abuse. — Indifference and Apathy of the Profession.

THE position of the medical profession at Glasgow is not encouraging. The medical men who hold office in the service of the hospitals say nothing. Whatever may be the evil of hospital abuse it does not affect them. In other towns I have found a greater disposition on the part of the leaders of the profession to take up the cause for its own sake though their personal interests were not at stake. The competition of the hospitals renders the position of the general practitioners more and more precarious and yet they cannot move in the matter unless the leaders of the profession lend a helping hand. In the meanwhile there is the fiercest competition for even the smallest appointment that happens to be vacant. This, of course, tends to make those who are in office very prudent and they refrain from complaints as they know that they could so easily be replaced by others who are longing for their posts. On the other hand, while the prevalence of disease is decreasing the facilities for obtaining advice and medicine gratuitously are increasing. No wonder, therefore, that the general practitioner finds his position becoming more and more desperate. The death-rate has been reduced within a fraction of 23 per cent. during the last forty years and at the same time hospital accommodation has immensely increased, to say nothing of benefit societies or provident medical clubs. During the ten years 1855-64 the proportion of the total deaths per 1,000,000 of the population amounted to 30,050, and during the ten years 1834-94 it was reduced to 23,175. The decrease in this period of forty years is equal to 51 per cent. in zymotic diseases, to 37 per cent. in phthisis, and to 12 per cent. in miscellaneous diseases. There is an increase of 3 per cent. in other lung diseases. The general death-rate shows a decrease of 23 per cent., as already stated. Extensive sanitary measures have largely contributed to bring about this good result, but increased and improved hospital accommodation has also helped to reduce the death-rate. This is notably the case in regard to the municipal hospitals for the treatment of infectious diseases. Formerly such cases were taken to the general hospitals. The first of these hospitals, the Royal Infirmary of Glasgow, was opened in December, 1794. It then contained 150 beds and Dr. J. B. Russell, senior medical officer of health, in his Sanitary History of Glasgow tells us that during the first five years of its existence 14 per cent. of the patients treated suffered from "fever." In 1816 the beds were increased to 230 and in 1818 no less than 60 per cent. of the patients were suffering from "fever." A temporary and extra hospital of 200 beds had then to be erected and a similar measure was taken in 1827. The number of fever cases increased; booths were erected, abandoned factories were turned into temporary hospitals, till at last in 1865 the first municipal fever hospital was opened in Parliamentary-road. From that time henceforth the treatment of fever cases was gradually removed from private practice and from the ordinary hospitals and confined to the municipal hospitals and a second institution of this description was provided at Belvidere. Thus we find that during the course of the thirty years 1865-94 no less than 16,796 cases of fever were received at the Parliamentary-road Municipal Hospital and 56,320 cases of fever and 1179 of small-pox at the Belvidere Municipal Hospital. This reaches a total of 74,295 patients treated in a great measure at the public expense.

At first there was considerable difficulty in dealing with non-pauper cases, but the local authority finally resolved "that all classes of the citizens suffering from infectious diseases should be treated in hospitals without any charge being made therefor." That these municipal fever hospitals have rendered most efficient service in checking the spread of epidemic disease cannot be denied; but however admirable these institutions may be from many points of view the figures given above clearly indicate that they must have materially decreased the amount of work remaining for the general practitioner. The fact that it is not only pauper patients that are taken to the fever hospitals must tend to diminish the sources of revenue on which the general practitioner was formerly able to rely. Doubtless it can be maintained that the interests of the general practitioner must be sacrificed when opposed to the general good of the community; but all that I at present seek to demonstrate is the fact that these interests have been sacrificed. Also I would add that if in respect to epidemic or infectious diseases there is a good reason for thus disregarding the material interests of the profession this reason does not apply with the same force to ordinary and non-infectious complaints and the increase of hospital accommodation does not extend only to cases of infectious disease.

After the Royal Infirmary a Lock Hospital was opened in 1805. It is the only hospital in Glasgow which has beds in excess of its requirements. There is room for more than 60 in-patients and it often happens that half the beds are empty. The Eye Infirmary was started in 1824 and the Maternity Hospital in 1834, and it now accommodates 34 in-patients. In 1861 these four hospitals possessed 770 beds or about 2 beds for every 1000 of the population. A Skin and Ear Dispensary was started in 1861, which subsequently became the Skin Hospital, with 20 beds attached to the Western Infirmary. Then the Ophthalmic Institution, which has now 35 beds, was opened in 1869 and the Ear Dispensary and Hospital was founded in 1872. But for the treatment of general diseases and injuries there was no important addition to the number of beds for the first eighty years after the opening of the Royal Infirmary in 1794. When, however, the University was removed to Gilmorehill it became necessary to have a hospital in the immediate neighbourhood of the schools. Therefore the Western Infirmary, containing 400 beds, was built. During the ten years 1871 to 1880 about 500 new beds were added to the hospitals of Glasgow and the proportion was 2·7 beds per 1000 of the population in 1881. The Sick Children's Hospital with 70 beds; the Victoria Infirmary with 150 beds; and the Samaritan Hospital for Women with 28 beds were created in the following decade. Altogether 340 beds were added to the hospitals from 1881 to 1891, bringing up the total to 1750 or 3·1 per 1000 of the population. Since 1891 the increase in the number of beds has about kept proportion with the increase of the population and the total number of beds available now is about 1770, but to this may be added 459 beds in convalescent homes which have gradually sprung into existence since 1865. Then there is an institution with 85 beds for infirm children founded in 1874 and a home for incurables with 115 beds opened the following year, bringing the total number of beds provided by medical charities to 2429, or 4·2 beds per 1000 of the population.

During the same period of years there has also been a great increase of medical charities which do not provide for indoor patients. There are numerous medical missions, nursing associations, public dispensaries, and the dental hospital. Then the number of beds provided by the Poor-law authorities should not be omitted and these amount to 1048. The municipal fever hospitals now have 902 beds, making a total of 1950 parochial or municipal beds for illness. Then there are 1234 beds for the insane. Thus, if we take the parochial hospitals and asylums, the municipal hospitals and the medical charities we get a grand total of about 5600 beds or 9·5 beds per 1000 of the population. If we deduct the 280 beds of St. Joseph's Home for the Infirm on the ground that it is scarcely a medical institution we have 9 beds per 1000 of the population of 1895, estimated at

[1] The previous articles on this subject were published in THE LANCET on the following dates: (1) Sept. 28th, 1895, Plymouth and Devonport; (2) Oct. 10th, 1896, Exeter; (2 *concluded*) Oct. 17th, 1896, Exeter; (3) Oct. 31st, 1896, St. Thomas's Hospital, London; (4) Nov. 14th, 1896, Liverpool; (4 *continued*) Nov. 21st, 1896, Liverpool; (4 *concluded*) Dec. 12th, 1896, Liverpool; (5) Jan. 2nd, 1897, Manchester; (5 *continued*) Jan. 9th, 1897, Manchester; (5 *concluded*) Jan. 23rd, 1897, Manchester; (6) Feb. 6th, 1897, Leeds; (6 *concluded*) Feb. 13th, 1897, Leeds; (7) April 17th, 1897, Coventry; (8) May 1st, 1897, The Royal London Ophthalmic Hospital; (9) May 8th, 1897, France, United Action and Legislative Action; (10) May 15th, 1897, Leicester; (11) June 5th, 1897, Nottingham; (12) July 31st, 1897, Birmingham; (12 *continued*) Aug. 14th, 1897, Birmingham; (12 *continued*) Sept. 4th, 1897, Birmingham; (12 *continued*) Sept. 18th, 1897, Birmingham; and (13) Oct. 30th, 1897, Southampton.

587,000, or 6·6 per 1000 of the population of the extended boundaries of the city, which is set down at 840,000.

In the face of these figures it is impossible to deny that there has been a formidable increase in the numbers of in-door patients, yet it is generally acknowledged that it is in respect to the in-patients that the least abuse exists. The position of affairs with regard to outdoor patients is more serious. Nevertheless, the medical profession at Glasgow cannot be said to be moving in the matter. Two medical men at Glasgow, Dr. Erskine and Dr. D. Campbell Black, have been prominent in their denunciations of these abuses; but they have met with little support from the profession at large. This lack of support may in a measure be due to the fact that these two gentlemen not only denounced hospital abuse but also advocated the municipalisation of all hospitals. Many medical men desire to reform the hospitals, but those who think such reforms should lead to the abolition of the voluntary system are far less numerous. Dr. Campbell Black, for instance, in a pamphlet entitled "The Medical Environment," says, when alluding to workhouse infirmaries, to lunatic asylums, and to fever hospitals: "The State, however, having taken the place of voluntary charity, the *raison d'être* of hospitals as *charitable* institutions disappears with one *coup* and their revenues should be forfeited and applied to some other purposes of public utility." Then he adds: "I know, further, that if in the animal world an organ ceases to functionate it atrophies and disappears, and I believe that correspondingly in the social world two organisations professing to achieve the same end cannot run side by side without mutual interference and injury." Dr. Black has further publicly argued that though advertising is considered most unprofessional voluntary hospitals are in reality run for the purposes of advertisement. "I know *not one* medical institution in Glasgow," he adds, "whose parentage has not been personal medical enterprise." Then the voluntary hospital, when once established, instead of being under public control, falls into the hands of a clique who take care to keep dangerous rivals at a distance. These rivals in their turn are obliged to found other hospitals for themselves and thus there is a wasteful competition between charities and hospital abuse naturally ensues. To illustrate this theory Dr. Black says: "Let me give an instance or two of men who did so who became thereby illustrious and dignified medical science. When James Syme found the doors of the Edinburgh Infirmary barred against him by that envy, jealousy, and exclusiveness which find such fertile soil in the medical temperament he opened Minto House as an hospital, compelled recognition of his genius, and vanquished tyranny. Spencer Wells founded the Samaritan Hospital in London and few names are held in higher professional esteem in his own particular walk. Lawson Tait founded the Hospital for Women in Birmingham and he is certainly not the least distinguished of living gynæcologists. Morell Mackenzie founded the Throat Hospital in London and made himself a world-wide reputation." But with the multiplication of hospitals financial difficulties must arise and the Glasgow Royal Infirmary had a deficit of more than £9000, the Western Infirmary one of more than £5000, and the Victoria Infirmary one of close on £2000 To increase their claims on the public a long list of cases treated must be published and if abuse was prevented this list would be curtailed. Then each charity has to pretend that it is the charity of all others which should be supported. "The Royal Infirmary now publishes a weekly statement of the cases treated to give point to its eleemosynary sob for coin; but it takes care to conceal from the public how many of the people treated, both within its walls and at its outdoor department, should have been treated by struggling juniors in the profession or to what extent it is engaged in robbing the profession and demoralising and pauperising the artisan and middle class. 'My dearly beloved bruddren,' said the nigger evangelist, 'de cause ob religion am de cause ob dis church, and de cause ob dis church depends on de passon's salary. De elders will now pass de contribution boxes!'"

In proof of the prevalence of abuse Dr. Black states in his pamphlet that he has treated at the Royal Infirmary a retired lawyer. At the Western Infirmary, which he qualifies as "one of the most abused institutions of the kind in the country," a man appeared with a respectable-looking woman whom he left there as a patient with the injunction that the "lady" was to receive "every attention." The patient was the mother of a police commissioner of one of the most prosperous districts of Glasgow. A boy was admitted to the same hospital for a resection of the knee-joint on a recommendation from a Glasgow magistrate who was a close relative of the patient and visited him in a carriage-and-pair. Dr. Black assured me personally that he had been reprimanded when he found fault with such abuse. If the newspapers were watched it would be found that they recorded the deaths at hospitals of persons in a good position. Thus about four months ago the death at the Western Infirmary of a retired business man was mentioned. His address was given. It was in Vincent-crescent, where probably £50 a year is charged for rent for the houses. At the Eye Hospital there was a rich man who had come from New Zealand. A Highland parish minister died in the Infirmary. The working classes, many of them earning £2 and £3 a week, thought they had a right to gratuitous treatment because they were made to subscribe a penny a week to the hospitals. Yet there were any number of men in the profession who were willing to take clubs at 2*s.* 6*d.* per annum per member. If a man could not pay half-a-crown per year he should be treated as a pauper. Not only were needy and junior medical men ready to accept such terms, but there were even some professors who did not scorn to take a 2*s.* 6*d.* club. The general practitioner was in a deplorable position. There were fully-qualified men who gladly visited patients in their own houses for a fee of only sixpence and there were several sixpenny dispensaries in existence.

Why, it will be asked, should workmen resort to a charity for medical advice when it costs so little to pay for such advice? One of the principal reasons is that the workmen do not look on the hospital as a charity. It is an institution for which they are not only compelled to pay, but they pay more than they would have to give to a private practitioner. The voluntary nature of the payment and the charitable character of the hospital is but a theory and so far as the workmen are concerned in no wise a fact. If a workman refused to subscribe he would displease his employer and his fellow workmen, so he gives a penny per week, and this makes 4*s.* 4*d.* per annum, when there are any number of medical men who would be glad to attend to him for 2*s.* 6*d.* a year. Why should the workman pay the larger sum if it gives him no claim? But it is not the workmen alone who imagine that they have a claim on the hospitals. As the secretary of the Charity Organisation Society observed to me, when householders subscribe a certain sum they think they have a right to send all their servants to the hospital, and Dr. Black quotes an announcement published in the *Glasgow Herald* of the death at the Western Infirmary of a patient who for many years had been "the faithful body servant" of an eminently respectable K.C.B.

Another reason for the rush upon the hospitals is the belief that superior advice can be obtained there. If the following passage from Dr. Black's pamphlet were more widely read this impression might in part be dispelled:—

"During my own incumbency of office as a dispensary physician to the Glasgow Royal Infirmary I have gone through the form of professionally seeing patients at the rate of sixty an hour! The prescribing and diagnosis were much after the time-honoured fashion of Dotheboys Hall. My conscience was not hurt by this snap-shot prescribing, as there was certainly nothing the matter with two-thirds of the cases, while the remaining third consisted of cases of hunger, chronic bronchitis, and various forms of struma; and occasionally a robust countryman who happened to be passing would be attracted by the urgent invitation outside to come in and be medically treated and responded as a matter of sheer civility. While so large a number as this was often seen it should be explained that few fresh prescriptions were written, but as the deluded people would break their hearts if they got no medicine (they subscribed to the institution and asserted claims) the old prescriptions were stamped so that a fresh supply might be obtained. If the patient was wanting in inclination or the courage to consume the 'medicine' thus obtained it was exchanged for money or drink with some less wise but more courageous valetudinarian."

This is certainly as bad as the "scamping" work of a medical aid association or a benefit club. These institutions often tend to degrade the practitioner because he has too many patients for it to be possible to treat them properly.

But Dr. Black further points out that "the objection to medical aid associations is that they treat people above the grade of the artisan class. If it be professionally 'infamous' to do so through these associations it is surely equally 'infamous' to treat this class in hospitals as is being constantly done. The difference is this: on the one hand it is the *poorer* members of the profession who are the culprits, on the other it is the *rich*."

(To be continued.)

THE PLAGUE IN BOMBAY.

(FROM OUR SPECIAL CORRESPONDENT.)

Death-rate.—Private Hospitals.—Quarantine Camps.

THE weekly return of mortality for Bombay gives over 2000 deaths—a rate equal to about 130 per 1000 per annum. This exceeds the highest point touched last year, but the city is now full of people—the birth-rate showing about the normal average—whereas last year the exodus was estimated at no less than 300,000 people. Comparison with the mortality chart of last year suggests that the present recrudescence is about a fortnight later in the season than the corresponding period of the first epidemic and that another week or two may be calculated before the mortality will show a course of decline. Fortunately this decline may be expected to be rapid.

With thirty private and three public hospitals for plague patients Bombay ought to be well provided for. The public hospitals might be considerably improved in many ways, but their general administration is very satisfactory. It is very different, however, with the numerous private institutions. While the *raison d'être* of their permitted existence—viz., to facilitate the removal of plague cases from the homes of the people—is to a certain extent admitted the management of many of these hospitals is worse than indifferent. They are subject to occasional inspection, but the immediate treatment of the patients is entirely under the control of the native medical attendants. As some of these men are extremely ignorant and careless and one at least has had no medical training whatever the patients are badly looked after at many places. Some few are clean, well managed, and properly treated. Most of these hospitals are simply ordinary houses utilised for the purpose and they are consequently placed in most insanitary surroundings, especially with regard to fresh air and sunlight. The rules seem to be extremely lax and therefore the advantages offered for isolation and otherwise preventing the spread of the disease are entirely lost sight of. Their existence satisfies to a certain extent caste prejudices and there would probably be much greater trouble in removing cases if these institutions were not available. That is about all that can be said in their favour. The patients would certainly be much better off if they were camped out in the open air even under the same indifferent management. The camps for the "evicted," for "contacts," and for quarantine of travellers are much more satisfactory. The people on admission are disinfected, their belongings are sterilised, and they are kept under healthy conditions for a required period of ten days. The rules, however, are not strictly carried out and consequently strict isolation is not always obtained. But the provision for life under healthy conditions and the removal from houses which are dark, dirty, unventilated, and stinking are decided advantages. Many thousands have benefited by these measures.

MANCHESTER.

(FROM OUR OWN CORRESPONDENT.)

Manchester Southern Hospital.

THE report read at the annual meeting of the Manchester Southern and Maternity Hospital held on Feb. 25th is not very cheerful. Within a little over a quarter of a century this hospital has grown from a small dispensary to a hospital with fifty-two beds in constant use, while in addition there are a large out-patient department for women and children and an extensive maternity home-patients' department "carried on by trained midwives under the strict supervision of the honorary medical staff." It was the first hospital in Manchester to supply in-patient accommodation for maternity cases and it is still the most important lying-in hospital in the north of England. It is also a school of obstetrics and gynæcology largely made use of by the medical students of the Owens College and has afforded training for midwives and monthly nurses. Its services are not confined to Manchester but extend over a wide area, including the towns of Lancashire and Cheshire where special hospitals do not exist. But lack of funds has decided the committee to put certain restrictions on the admission of women and to close twelve of the children's beds till more prosperous times come round. That this is advisable is evident from the fact that for the last few years the hospital has been spending about £1000 a year more than its income. This sort of proceeding is no doubt a weakness into which hospital committees are too apt to be led, but the excuse in this case was the promise, subject to an amalgamation with St. Mary's Hospital, of £70,000 from the Lewis trustees to build a new hospital, and the committee had every reason to believe that the conditions would be fulfilled. The breakdown of the negotiations injured both hospitals, but the Southern Hospital was not so well able to bear it as was St. Mary's Hospital, and during this period of anticipation and suspense "the small capital of the hospital has been nearly absorbed." The failure of the amalgamation scheme does not lie at the doors of the Southern Hospital, and if it is not permissible to speak of justice in its treatment we may still regret that it has suffered from undeserved misfortune. As Dr. A. W. Ward, the ex-Principal of the Owens College, said, "The state of things was simply a lamentable one" and "it would be only by strenuous and individual effort that they could maintain the efficiency of the institution." This effort will surely be made.

The Royal Infirmary and the Corporation.

At the meeting of the Manchester City Council on Feb. 16th, the scheme for the sale of a large portion of the ground surrounding the infirmary for £286,000 was the subject of a long discussion. Sir John Harmood moved: "That the report of the Special Committee *re* Royal Infirmary" and the recommendations contained therein "be approved and adopted." It was decided in the end that the report should be referred to the committee for further consideration and report. There was evidently a strong feeling against the scheme and in favour of the purchase of the whole site, if it could be arranged for, utilising it for business premises — according to one intelligent and utilitarian speaker—with the view of building an art gallery and free reference library. This would be far preferable to the mutilation contemplated in the special report.

Proposed Enlargement of Monsall Fever Hospital.

The Monsall Fever Hospital, it may be remembered, was recently taken over by the corporation from the Manchester Infirmary. For some time past a sub-committee of the Sanitary Committee of the corporation has been considering the question of increased accommodation for infectious cases and they recommend the addition of several wards, an isolation ward, an erysipelas ward, and also a considerable enlargement of the administrative department. The cost is estimated at about £27,000. In view of these changes and to give the necessary space for the isolation of the patients—so as to protect the hospital as well as the public—and to provide a recreation ground for the patients a purchase of about 13½ acres of land on the northerly side of Monsall has been made for the sum of £8108. There is at present accommodation for about 390 patients. The scheme has been virtually accepted by the Sanitary Committee and will probably be sanctioned by the Council.

Manchester Medical Social Union.

An association of which the membership is confined to qualified medical men who have been educated at the Owens College has been recently formed with the title of the Manchester Medical Social Union. The first of a series of social meetings was held on the evening of Feb. 22nd Dr. Judson Bury presided and said "the union came to supply a long-felt want in the profession." The evening was devoted to a musical and literary entertainment. All good wishes may be offered to the new society, for friendly gatherings of this kind are among the best antidotes to the jealousy and the isolation into which competing members of

the same profession are often in danger of falling. Considering, however, that the *alumni* of the Owens College form only a section of the qualified medical men in Manchester the assumption of so comprehensive a title as that of the Manchester Medical Social Union, the membership of which is so limited, seems somewhat inappropriate, pointing rather to exclusiveness. A title indicating its connexion with the College would have been more accurate and quite inoffensive. Though somewhat different in aim and character from the Medico-Ethical Association and the Medical Guild all tend in the main to the same end, to strengthen the sense of brotherhood and of a common interest among the scattered members of the medical profession which in these days of almost constant assault on its rights and privileges has become not only desirable but necessary. Their annual reports show that both the latter have been doing good work, while the younger society may be congratulated on the progress which it is making and on the position it has already attained.

Feb. 28th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

Edinburgh Royal Hospital for Sick Children.

THE thirty-ninth annual meeting of this hospital was held on Feb. 22nd. The annual report showed a considerable increase in the number of patients treated in the wards and in the dispensary during the past year. In the year ending Dec. 31st, 1896, there had been 1101 patients treated in the wards of the hospital and at the dispensary during the same year the medical and the surgical patients had numbered 7455 and 5885 respectively. During the year just closed the number of patients treated indoors had reached 1240, while the medical out-patients numbered 9583 and the surgical 5331, with, in addition, 59 vaccinations. There had thus been an increase of 1671 cases during the past year. The ordinary income had been £5665 10*s.* 8*d.* and the ordinary expenditure £6310 13*s.* 4*d.*, there being a deficit of £645 2*s.* 8*d.* There had been an increase in the annual subscriptions but a decrease in church collections. In making acknowledgment of benefits received the directors expressed their gratitude to Sir Squire Bancroft, who had given a reading in aid of the hospital funds, and to Colonel Bathgate, who had presented for the Bathgate ward twenty-four hospital cots. They also pointed out the deep obligations under which they lay to the honorary secretaries, Messrs. Henry and Scott, for their services, which had extended over a period of forty years. In moving the adoption of the report the chairman pointed out that the cost of maintenance per child had been reduced from £5 7*s.* 9*d.* to £5 0*s.* 4*d.* The total cost of the new hospital had been £52,277 and the accounts in connexion with the building were now all paid. They were now, however, dependent on the annual subscriptions for the further maintenance of the hospital. The size and airiness of the new hospital seemed to have a very beneficial effect on the patients. They were now admitting infants under two years of age, these children forming the most serious of their cases.

Appointment to the Royal Infirmary, Edinburgh.

At the meeting of managers on the 31st ult. Mr. Alexander Miles, M.D., F.R.C.S. Edin., was appointed an assistant surgeon. Mr. Miles is at present surgeon to Leith Hospital and is looked upon as one of the most promising of the younger surgeons connected with the Edinburgh School.

The Scottish Universities and their Graduates.

The movement in favour of obtaining for the authorities of the Scottish universities the power to exercise discipline over their respective graduates is at last taking definite shape. The most active steps in this direction have been promoted by the University of Glasgow and at a recent meeting of the University Court it was reported that the other three universities had forwarded the names of their representatives appointed to act on a joint committee in connexion with this question and Sir William Gairdner was authorised to take the steps necessary to call this committee together. If the aim of the committee is attained Scottish medical graduates will be brought into the same relation to their degree-granting bodies as at present obtains between Licentiates in medicine and surgery and the corporations from which they hold their Licences. Thus graduates equally with Licentiates will be liable to be censured or to have their names removed from the University List for proved misconduct, whilst at present the holder of a university degree retains and can use his degree even though his name has been removed from the Register by the General Medical Council.

Glasgow Microscopical Society.

At a meeting of this society on Feb. 10th Dr. William Snodgrass, Senior Demonstrator of Physiology in the University, lectured on the Glandular Structures of the Alimentary Canal. The lecture, which was delivered in the University class-room, was illustrated by chemical experiments and by numerous diagrams and microscopic specimens. The President, Mr. W. Rankin, M.B., presided.

Aberdeen Dispensary.

During 1897 10,139 cases were treated, being an increase of 83 on the year 1896. 2850 patients were attended at their homes, an increase of 21, and the number of visits shows an increase of 593 over the previous year. The number of medical students who paid for admission to the general practice of the dispensary was 60, an increase of 27. The amount of subscriptions to the general funds was only £118 17*s.* 6*d.*, but owing to donations and legacies the total income exceeded the ordinary expenditure by £843. A deficiency of £127 10*s.* 11*d.* on the maternity department will, however, have to be made good out of the general funds.

Aberdeen University Medical Society.

At the concluding meeting of the present session several interesting papers were read. The office-bearers for next session are: Hon. President, Professor Cash. Presidents, J. A. Stephen, M.A., and J. A. Mavor, M.A. Secretary, L. P. Stephen, M.A. Recording secretary, G. A. Finlayson, M.A. Treasurer, H. Fraser. A committee of six was also appointed.

Academic Honours for Medical Men.

The University of Aberdeen propose to confer the honorary degree of D.D. on the Rev. James Shepherd, M.A., M.D. Aberd., medical missionary, Ondeypore, India; and that of LL.D. on Dr. William Osler, M.D., F.R.C.P. Lond., Professor of Medicine in the Johns Hopkins University, Baltimore, U.S.A.

March 1st.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

The Royal College of Surgeons in Ireland.

THE most important examination for the Fellowship of this College that has been held for years terminated by conference on Feb. 28th. There were no less than fourteen candidates, eleven of the junior grade—that is, of less than ten years' standing—and three of the senior rank. Of the junior four were rejected while one retired. At the senior and final examination one lady, four well-known hospital surgeons, and one gentleman from New Zealand passed. Dr. Robert Woods, F.R.C.S. Irel., has resigned the position of secretary to the Council of the College, but will discharge the duties of the office until the date of the new election on the first Monday in June.

The Waterford District Lunatic Asylum.

The Lord Lieutenant has recently appointed Dr. Oakshott, senior assistant medical officer to the Cork Asylum, to the position of medical superintendent of the Waterford Asylum in the place of Dr. Ringrose Atkins deceased.

The Lister Hospital for Women and Children.

At the annual meeting of this hospital held on Feb. 22nd it was reported that the attendance in the women's department was 1564 and in the children's 9391. 72 women and 177 children were admitted into the wards. In submitting the medical report the secretary, Dr. Cecil Shaw, said that nothing short of a properly equipped maternity with six beds would meet the urgent needs of the neighbourhood. The hospital, he said, was situated in the midst of an enormous working-class population, many of whom are so poor and in such bad sanitary surroundings that it was impossible for either medical man or nurse to do their work satisfactorily while the patients remain in their own homes. He hoped that a successful effort would be made at no

distant date to add this much-needed ward to the hospital. There is a balance to the credit of the hospital of £77 1s. 11d. to begin the year with. The late Mrs. Henderson, mother of the present Lord Mayor of Belfast (who presided at the annual meeting), left £300 to the hospital.

The New Irish Local Government Bill.

The Bill which has been introduced by Mr. Gerald Balfour (Chief Secretary for Ireland) will, if passed, make great changes as far as the medical profession is concerned. County councils are to be established and they, through a committee appointed by them, will take over the charge of the lunatic asylums. The present plan of appointing governors is to cease and the board of control in Dublin will be abolished. In cases where one asylum does for two counties then a joint committee will be appointed by the two county councils to take over the asylum. One-fourth of these asylum committees may not be members of the county council. The Lord Lieutenant must approve of the arrangements made by the county councils for the management of asylums and lunatics now confined in the workhouses will be transferred to the asylums. The Lord Lieutenant has to concur in the appointment or removal of the resident medical superintendents of the asylums. In future, coroners, who will not be qualified if appointed to be elected or to be a county or district councillor, are to be chosen by the county councils. With reference to the Poor-law system district councils will take the place of the dispensary committees, which will cease to exist, and these district councils will be the rural sanitary authority. *Ex-officio* guardians will be done away with and the district councils will act as guardians of unions. In each union half the salary of a trained nurse will be paid by an Imperial grant.

Public Health Prosecution.

On Feb. 25th a man was brought before the Belfast magistrates and fined £2 (subsequently reduced to £1) for refusing to give up clothes to the sanitary authorities for the purpose of disinfection, an outbreak of typhus fever having occurred in his house. It was said that there had been six cases of the disease.

The Belfast Royal Hospital.

At the quarterly meeting held on March 31st it was reported that during the past three months 545 intern and 5674 extern patients had been treated. The balance due on Jan. 1st by the hospital was £1350 11*s.* Since the beginning of the financial year the indebtedness of the hospital has increased £1000 14*s.* 6*d.*, equal to about £6 10*s.* 10*d.* per day. In moving the adoption of the report the secretary pointed out how creditable the subscriptions from the working-classes were, reaching £2415 1*s.* 1*d.* in the year, to which they had increased from £256 17*s.* 7*d.* in 1878; while, on the other hand, the church collections had decreased from £562 11*s.* 5*d.* in 1878 to £405 8*s.* 6*d.* at present. There are 163 houses of worship in Belfast and yet in only 66 of these were collections made for the hospital funds. As the secretary so well said, "Why have we not an annual Hospital Sunday collection on a particular Sunday in the year in all our churches? Surely if the heads of the different churches were to put their heart into this great and noble work we should soon have a real 'Hospital Sunday,' when all would be prepared to give to this good cause."

The Belfast District Lunatic Asylum.

At a special meeting of Governors held on Feb. 28th a report in reference to the financial adjustment of the relations between the county of Antrim (and Carrickfergus) and the Belfast district was considered and—with the exception of certain clauses—passed, but the members of the county Antrim grand jury declined to vote and there were no representatives present from the city council. The new Local Government Bill (if passed) will so completely alter the present government of the asylums that it is probable no further changes will be made and everything in connexion with these institutions is at present regarded as being in a transitional condition pending Imperial legislation.

Dr. Haran, who had been house surgeon to Barrington's Hospital, Limerick, has been appointed medical officer to the British East Africa Protectorate. Prior to his departure for his new sphere of duties he was entertained by the staff of the hospital and reference was made to the efficient and assiduous manner in which he had at all times carried out the instructions of the visiting staff.

Dr. Hinkman was last week unanimously elected house physician to the Cork Mercy Hospital.

March 1st.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

Acetate of Thallium in the Treatment of the Nocturnal Sweats of Phthisis.

AT the meeting of the Academy of Medicine held on Feb. 22nd, Professor Combemale, of Lille, mentioned that he had administered this drug in the form of pills of ten centigrammes in cases of excessive sweating. In thirty patients, either tuberculous or affected with some other disease, who suffered from profuse nocturnal sweats one only was not at all benefited and one other was slightly relieved without being completely cured. Those patients who suffered from large cavities and were very cachectic were most benefited, for contrary to other anti-sudorifics the acetate of thallium produces its greatest effect in very cachectic patients, and those suffering from leucocythemia are also much benefited. In old cases of tubercle which are drying up or in those in which softening is just beginning the drug has not the least effect. Old cases of bronchial dilatation and of chronic bronchitis, which suffer from sweating as much as tuberculous patients do, also derived benefit from theacetate of thallium. The daily dose is from ten centigrammes up to in some cases twenty centigrammes. It must not be given for more than four days in succession, for its effects are very lasting and persist for from eight to ten days, but refractory cases show no improvement even after eight days. The drug ought to be given about an hour before the time when the profuse sweating generally begins. In three cases complete alopecia followed the use of the drug. In from two to eight days the patients lost all their hair, but it is to be remembered that they had already begun to lose their hair and had taken from 80 to 110 centigrammes of acetate of thallium in the course of a month. On the other hand, tuberculous patients under the same conditions whose sweating had been arrested by two doses did not suffer from this sudden loss of hair. Professor Combemale concluded that this accident need not be feared except after prolonged use of the drug or too frequent doses.

Non-Saccharine Diabetes.

At the meeting of the Medical Society of the Hospitals held on Feb. 18th, MM. Achard and Weil made a communication on this subject. In constitutional diabetes, which is generally called fatty or arthritic or gouty diabetes, glycosuria is not nearly such an important symptom as it is in pancreatic diabetes. Often, in fact, there is hardly any sugar in the urine and the other elements of the disease, such as polyuria, polydipsia, and voracious appetite, are also but little marked. For these reasons diabetes must be considered not as a disease of one particular organ, such as the liver, the pancreas, or the kidney, but as an expression of a general disorder the place of which in the table of diseases is just as important as the mere symptom of glycosuria. Glycosuria undergoes great fluctuations in this particular form of diabetes. Sometimes it disappears altogether under various influences and the general disturbance of the organism persists all the same. On the other hand, the general disturbance which can persist after the disappearance of the glycosuria always precedes it. Ordinarily the discovery of sugar in the urine is made by pure accident, and after this discovery as before the general condition remains the same, the diabetic patient preserving the appearance of robust health. MM. Achard and Weil think that the malady being thus started, or at least its plan being laid down, before the establishment of glycosuria, one is forced to agree in the possibility of such a thing as *diabete fruste*—that is to say, a constitutional diabetes without glycosuria—a morbid condition which might be compared to Bright's disease without albuminuria. But how is the malady to be diagnosed in the absence of sugar in the urine? MM. Achard and Weil consider that the answer to this problem is to be found in the glycolitic power of the tissues. This proof consists in introducing glycose into the organism without allowing it to pass through the liver—that is

to say, by injecting it under the skin and observing if it is excreted in the urine. Like all other sugars glycose injected under the skin brings on polyuria and azoturia, but the injection is quite harmless and well borne by the patient if it be deeply made and with strict aseptic precautions. It is quite easy to introduce ten grammes of pure glycose in twenty cubic centimetres of solution divided into two portions of ten cubic centimetres each, which are injected into the thighs. This dose in a normal person brings about no glycosuria. MM. Achard and Weil have verified these results in forty patients who were either healthy or suffering from various diseases. When a diabetic patient was submitted to this test there was a transitory augmentation in the secretion of sugar. In five patients who presented conditions recalling those found in diabetes with sugar but who had not habitual glycosuria — a disease which the investigators called *diabete fruste*—the test showed the existence of an insufficient glycolytic power in the tissues. It is possible that this incomplete form of diabetes always remains incomplete in certain patients and that the sum of its symptoms is never completed by the appearance of sugar in the urine, but it is reasonable to suppose in view of the facility with which a temporary glycosuria can be produced in such patients that the symptoms are but a prelude to the confirmed saccharine diabetes.

The Case of Dr. Laporte.

The appeal entered by Dr. Laporte has just come in before the Court of Appeal—i.e., on Feb. 25th. Dr. Laporte was present with his counsel, M. Henri Robert, and Professor Pinard was also present. As no witnesses are allowed to give evidence in this court, Councillor Ayrault, who read a long and scrupulously fair *résumé* of the proceedings in the court of first instance, and Councillor Pottier, the president, put a series of questions to Dr. Laporte in a very kindly manner, which was in marked contrast to that of the proceedings before the Tribunal. M. Henri Robert argued that the charge of negligence against his client had never been proved, and he concluded by demanding the rehabilitation of Dr. Laporte. The Deputy Procureur-Général also came to the same conclusions, although not upon the facts advanced by the counsel for the defence or upon the facts brought forward by Professor Pinard, but upon absolutely opposite grounds and arguments which will give great satisfaction to the medical profession. He considered that the injuries produced in the patient were due to Dr. Laporte, but he also considered that when the circumstances under which that unfortunate medical man had been obliged to operate were taken into consideration he was absolved from all blame. Judgment will be given in eighteen days from the hearing, but it is pretty obvious that it will be one to satisfy both Dr. Laporte and the profession in general.

March 1st.

ROME.

(FROM OUR OWN CORRESPONDENT.)

"'Cross-Counter Therapeutics."

UNDER this title I have given examples of the practice, as dangerous as it is "irregular," of asking and receiving medical advice across the pharmacy counter. Mistakes on either side — the "patient" wrongly interpreting his symptoms, the "medical adviser" wrongly prescribing for them—I showed to be frequent, though not perhaps so appallingly tragic as that reported from Castellammare last summer,[1] when an overdose of aconitum napellus wrought the well-nigh instantaneous death of both parties to the transaction—the "patient" who asked to be prescribed for and the "consulting pharmacist" who, to do him justice, had "the courage of his prescription" and experimented on himself with the fatal dose. The Government, I am glad to say, is at last awake to the risks of the practice and is doing its best to minimise them in every possible way. One step it has taken which must react for the public good, not only in the above-indicated direction, but even in the legitimate business of the pharmacy where the medical man's prerogative is not usurped. Here in Rome, in the later months of last year, it had come to the knowledge of the Delegato Cortesi that the law had been systematically contravened by a number of leading pharmacists—the law, to wit, which makes it penal for such men to absent themselves from their places of business without leaving in charge proper representatives furnished with the diploma required by statute. The offending parties, after evidence duly laid and considered, were at the instance of the Public Prosecutor fined 100 francs (£4) each, while the unqualified representatives they had left in charge were fined 83 francs (£3 6*s.* 8*d.*) each. If, remarks a contemporary journal, this reprehensible and dangerous practice is so common in the capital, what must it not be in the provincial centres and country towns? And if the *rôle* of "consulting pharmacist" is so full of risk when performed by the head of the shop, what must it not be when undertaken in his absence by the "raw lad" whom he has illegally left in charge? The answers to these questions should be seriously weighed by the public—particularly by the travelling public so often tempted from a purblind "economy" to go past the duly qualified practitioner and commit health and life to the nearest pharmacist or as likely as not to his unqualified assistant.

Feb. 25th.

[1] THE LANCET, June 5th, 1897, p. 1558.

VIENNA.

(FROM OUR OWN CORRESPONDENT.)

Professor Stricker.

ON March 1st Professor Stricker, the renowned teacher of experimental pathology, will celebrate the twenty-fifth anniversary of his promotion to be ordinary professor. He has been the founder of experimental pathology in Austria, and has written a great many works and pamphlets, among which his treatise on the Theory of Inflammation is perhaps the most celebrated.

Pensions of District Medical Officers.

On Feb. 19th the Moravian Diet passed a law relative to the pensions of district medical officers as well as to those of their widows and children. A pension of 500 gulden (about £42) is secured by forty years' service; after ten years a medical officer receives 40 per cent. and for each additional year 2 per cent. of the salary last drawn. A widow's pension is fixed at one-half the above-mentioned rates and the payment for each child is one-fifth of a widow's pension, with the restriction that the total payments for the children shall not exceed the amount of a widow's pension. Whenever a medical officer has held his appointment for five years his widow becomes entitled to a pension, which is calculated as if he had served ten years.

Diagnosis of Gastric Disorders.

At the last meeting of the Vienna Medical College Dr. Hammerschlag read a paper on the diagnosis of diseases of the stomach, in which he said that the proper examination of the gastric functions was a matter of importance and should extend to both the movements and the secretion. The gastric juice varies according to the food which is taken and also according to the time of day; it is investigated by analysing the gastric contents collected after a test meal and amounting to 50 c.c. or 60 c.c. A quantity exceeding 100 c.c. or the presence of portions of food remaining from the previous day indicates an abnormal condition of the function of secretion. The production of hydrochloric acid may be either deficient or excessive; the latter condition admits of two alternatives, one of them being marked by an increase in the amount of the acid above its normal proportion of about 1·5 per cent., whilst in the other the total quantity of the gastric juice, but not its relative acidity, is augmented. These two abnormalities are termed respectively hyperchlorhydria and hypersecretion. The symptoms of hyperchlorhydria are pyrosis, sour eructation, gastric pain, and sour vomiting; it is distinguished from excessive formation of lactic acid by chemical analysis and by the power of digesting starch. Hyperchlorhydria occurs in a great many disordered conditions of the stomach, as, for instance, in neurasthenia, in gastric ulcer, and in cases of the excessive use of alcohol and tobacco. When the hyperchlorhydria is slight the pain is trifling and may be assuaged by alkalies, when there is an ulcer the pain is considerable, and when the

disorder is of nervous origin the pain, unlike that due to an ulcer, is more influenced by mental emotion than by the food. In hyperæsthesia of the gastric mucous membrane, as met with in hysteria, chlorosis, and influenza, there is intense pain after meals; in ulcer there is also pain after the ingestion of fluids. The treatment consists in the use of a 2 per cent. solution of nitrate of silver, a small teaspoonful of which is taken before meals. Patients who suffer from gastric ulcer vomit but rarely, and never when the stomach is empty, but the gastric crises in cases of tabes are on the contrary attended by frequent vomiting on an empty stomach, by hæmatemesis, and by pains which continue for several days and are independent of the food. In intermittent or chronic hypersecretion there is persistent formation of gastric juice. The chronic form often occurs in ulcer and neurasthenia; it is characterised by a painful feeling of hunger, by the vomiting of sour liquid, and by the disappearance of the pains after food. It, moreover, interferes with the mechanical action of the stomach and leads to dilatation. The stomach after fasting is also found to contain a large quantity of fluid coloured green by biliverdin. Diminished secretion of gastric juice is characterised by dyspeptic symptoms, a feeling of oppression in the stomach, nausea, eructation, and anorexia; it has both an anatomical and a nervous etiology. In catarrh the secretion of mucus is increased and nervous dyspepsia is attended by neurasthenic symptoms. Deficiency of hydrochloric acid occurs in catarrh of long duration, in atrophy of the mucous membrane, in gastric neurosis, and in cancer. In the last case the lactic acid is increased in quantity.

Professor Schweninger.

On Feb. 12th the weekly paper *Die Wage* (i.e., *The Balance*) arranged a conference at which Professor Schweninger delivered an address before a popular audience. It is well known that Professor Schweninger is Prince Bismarck's medical attendant and it has been suggested that he owes his professorship to the fact that he succeeded in reducing the Chancellor's obesity. Those who have heard or read his address must acknowledge that it was not of much interest. He spoke on a great variety of subjects such as the late Pastor Kneipp, Professor Schenk's theory, &c., expressing opinions which might be held by a man who had been asleep for the last forty years. The principal charge which he brought against medical men was that their faculty of perception is so deficient that they are under the necessity of asking for details as to the history of an illness "instead of reading it from the eye of the patient." He also inveighed against the medical men of to-day who learn too much. The medical profession and the medical journals in Vienna have not been backward in criticising the proceedings.

The Fango Treatment.

The "fango treatment" consists in the therapeutical use of a kind of mud obtained from the five lakes of Bataglia, *fango* being the ordinary Italian word for mud. The substance in question forms a greyish-brown homogeneous mass which adapts itself to the body like a plaster-of-Paris bandage, it retains its heat for a longer time than any poultice does, and it has the advantage that it does not cause the rashes which are brought out by *Moor* (a kind of peat). It contains abundance of oxide of iron, salts of calcium and magnesium, silicic acid, and a little organic matter. In a paper on the application of fango read by Dr. Rufschnaiter at the last meeting of the Vienna Medical Society he stated that the affected part of the body is plastered with it and covered with a cloth. At the commencement its temperature ought to be 42° C. (106·6° F.) and may be increased to 54° C. The application lasts twenty minutes and produces copious perspiration without any increase of either the respiration or the pulse-rate and there are no symptoms of weakening of the heart such as result from bathing in water, but the temperature may rise 1·5° C. (2·7° F.). Analysis shows an increase of the nitrogen and the uric acid excreted and a diminution of the water in consequence of the diaphoresis. Fango may be applied over extensive surfaces without producing congestion; it acts as a diaphoretic, as a derivative in hyperæmia of the internal organs, as an anodyne in neuralgia and rheumatism, and as an absorbent in joint affections and chronic endometritis.

Feb. 27th.

CONSTANTINOPLE.

(FROM OUR OWN CORRESPONDENT.)

Free Dispensaries.

TWO large dispensaries have done good and praiseworthy service during the past year in the most needy quarters of this cosmopolitan metropolis. Dr Kools is the medical superintendent of the large dispensary in Koum Capou, which is crowded with perhaps the poorest classes of Armenians. This dispensary carries on its work very much like a "medical mission" in England. I have the report of the dispensary before me, which shows that 2299 people received medical advice and medicine in 1896, whereas no less than 6062 people have been attended to in 1897. The dispensary has carried on its work without any distinction of race or creed. The other free dispensary was opened last year in Pera, where a group of well-known Armenian doctors have freely and voluntarily given their services for the poor of the district. This is more like a parish dispensary; the medical superintendent is Dr. Tavitian.

The Imperial School of Medicine.

The School of Medicine is to be transferred to Haïdar Pacha. The construction of the new buildings was commenced last year, but it was interrupted because of lack of funds. The Sultan being informed of this fact has now given orders to the Sublime Porte to do all that is necessary to continue and complete the works at the earliest date possible. The Council of Ministers have considered the matter and have found sources for raising the necessary amount of money. The work of construction is to begin soon and will probably extend over a period of three years. This arrangement if accomplished will no doubt be of the greatest help and service to the Turkish medical student, as the premises of the new medical school will be in the immediate neighbourhood of the large hospital at Haïdar Pacha.

The Society of Medicine.

In the last general meeting of the above society the following gentlemen were elected as members of the Council for the present year:—Dr. Khorassandjian, president; Dr. Economides and Dr. Bitlis, vice-presidents; Dr. Adamides, general secretary; Hodora Bey and Mr. Apery, special secretaries; Mr. Stamadiades, librarian; and Mr. Christophorides, treasurer. The retiring president of the society, Dr. Kambouroglou, is the most popular surgeon in the empire and the new president, Dr. Khorassandjian, enjoys such a popularity as a general practitioner in all the parts of the country as has perhaps never been surpassed in the professional annals of this country. Upon the proposition of the retiring council Mavroyani Pacha was appointed an honorary member of the society.

Feb. 22nd.

NEW YORK.

(FROM OUR OWN CORRESPONDENT.)

The Marine Hospital Service as a National Quarantine Board.

THE Senate Committee on Public Health and National Quarantine in its report states: "In our opinion it is wise and necessary to retain the present system of quarantine under the management of the Marine Hospital Service, with its hospitals, quarantine stations, improved apparatus for the investigation of disease germs, and corps of officers, 25 per cent. of whom have experience in the prevention and treatment of infectious diseases and especially of yellow fever. It may be found expedient hereafter to expand the service into that of a department, but to do so now would mean the useless expenditure of money and the destruction of the only systematic antagonism to the invasion of contagious disease. While we believe that the quarantine jurisdiction should be retained we are clearly of the opinion that its powers should be enlarged and made more distinct and uniform. No timidity or adherence to technicalities should prevent the adoption of any measures which are necessary to exclude contagious diseases from our shores. The experience of past years, and especially of last summer, demonstrates the absolute and immediate necessity of so amending existing

laws as to enlarge and concentrate the powers of the Marine Hospital Service so that the present sporadic and conflicting condition, in which there is constant friction and collision between Federal and State officials, shall be changed and the exclusive ultimate control be given to one authority."

The Source of the Yellow Fever Epidemic.

The committee of the Mississippi Legislature appointed to investigate the yellow fever of last summer has made its report. The committee finds that yellow fever prevailed during four months at Ocean Springs and that it was introduced into this country by a Mississippi family who had been temporarily in Guatemala and who came to the United States on the Central American steamer *Breakwater*. Their baggage was neither fumigated nor disinfected and they went directly to Ocean Springs, where one of them was taken sick with fever. Within a few days other cases of fever appeared in their immediate neighbourhood and from that time a disease of the same character prevailed at Ocean Springs until the end of the summer, although it was not diagnosed as yellow fever until September. The committee attributes the introduction of yellow fever to the fact that the quarantines of the Gulf States against the West Indies and Central America go into effect on May 1st, whereas the *Breakwater* brought the disease into the country in April before the quarantine was put into operation. This shows the necessity for early quarantine in order to assure protection. The committee also investigated the amount of damage done by the yellow fever scare and found it to be greater than estimated. The loss to business in the State during the prevalence of the scare was from 25 to 40 per cent. and property on Mississippi Sound has shrunk 30 per cent. in value because of the fever. The expense of the various quarantines in vogue was found to run as high as $5000 in many of the countries.

Cost of the Charities of the State of New York.

From the statistical tables of the thirtieth annual report of the State Board of Charities, the last published, it appears that the State and local institutions—that is, the public charities—held property real and valued at over $12,000,000, while that of the private charities was valued at $69,000,000. The total revenue of the public charities during the fiscal year was over $4,000,000 and that of the private charities over $17,000,000. The public charities at the close of the fiscal year had nearly 20,000 inmates and the private charities 48,000. These statistics include only such charities as are subject to the supervision of this board.

Laws relating to Medical Experts.

The New York Academy of Medicine appointed a committee to report what legislation, if any, should be secured regulating the selection of experts by the courts. The committee conclude that any measure looking towards a reform in the present methods of offering expert testimony should proceed along three distinct lines: (1) to establish a standard of excellence; (2) to secure the appointment of experts in any case by the presiding justice of the court so that the expert should have a judicial function and be free from bias; and (3) fees should be fixed by the court. The committee decided to recommend that persons desiring to practise as experts should be required to register with the regents of the university, presenting certain evidence of qualification, the applicant to specify what department of medicine he desires to appear in, either surgery, medicine, obstetrics, gynæcology, chemistry, pathology, nervous diseases, or insanity; to state that he has been in the practice of medicine for ten years and in that of the speciality for three years; to show that he has had special opportunities for research for three years in laboratory, hospital, dispensary, or asylum practice; to present a certificate of good moral character; and to have his qualifications sworn to and endorsed by two officers of the county medical society or association of the school to which he belongs and certified to by a justice of a court of record of the district in which he lives. The committee recommend the appointment of the experts by the judge of the court in which the case is tried, upon the application of counsel for either side or in the wisdom of the court. It recommends that the court should appoint three or more experts to act as judicial advisers. The experts are to be allowed to receive all information possible from counsel on both sides; they are to be allowed to examine material or patients; they are not to express any opinion to anyone excepting to each other, and their testimony is to be elicited by questions and cross-questions before the court.

Why most Immigrants land in New York.

Mr. Ernest Ingersoll in a paper on the Greater New York says: "The merchants of New York sent to the continent of Europe more ships than the merchants of other cities who traded mainly with Great Britain, so that this city was better known throughout Europe and her vessels were the handiest for emigrants from France, Germany, and Holland. Agents of the New York merchants and of the Government who were seeking and encouraging immigration could show that this port was the most advantageous landing-place for a man who was going out west, and the sea-captains explained that it was the safest and quickest port to make because the course lay south of the stormy, foggy region north of Cape Cod and the city was much closer to the open sea than Philadelphia or Baltimore. At any rate, immigration increased in favour of New York as time went on and the stream of in-coming people swelled until in the decade from 1884 to 1894 it amounted to about half a million of immigrants a year, 590,666 arriving in 1890 alone, not counting those from Canada and Mexico."

Feb. 18th.

Obituary.

JOHN HODGSON WRIGHT, M.R.C.S. ENG., L.S.A., J.P.

MR. HODGSON WRIGHT, the oldest practitioner in Halifax, and until a few months ago one of the most active, has just passed away. An attack of influenza last spring left him considerably debilitated and a cardiac neurosis of an anginal character developed, asserting itself after exertion, which it did finally at the meet of the Badsworth hounds to which he had ridden as a spectator and not as an active participator of the sport. Mr. Wright was born in Halifax in the year 1833 and leaves a father who, although ninety-three years of age, is still active. He was educated at Charing-cross Hospital and became M.R.C.S. Eng. in 1855 and L.S.A. in 1856. After holding several appointments in London hospitals he settled down to practice in his native town and soon became successful. In course of time he was elected surgeon to the Halifax Infirmary and speedily came into prominence, his services being in much request in the town and surrounding districts as an operator. After thirty years' faithful work as a member of the hospital staff Mr. Wright retired from the position of senior surgeon only a month before his death and was elected consulting surgeon. At the meeting of the infirmary board at which his resignation was announced it was unanimously resolved that a subscription be opened to raise a fund sufficient to procure a painting of Mr. Wright to be hung in the board room and a replica to be presented to himself, but his untimely death prevents the paintings being accomplished except from a photograph. Through the energy and public spirit of Mr. and Mrs. Wright the poor of Halifax have for many years past had four nurses to attend them in their homes and four years ago Mrs. Wright established a home for at least twelve incurable patients in the administration of which her husband took an active part. In the Crossley Orphanage, one of the largest institutions of its kind, he also took a great interest and acted as medical officer to it. He was very fond of sport and occasionally spent a day in fishing, shooting, or hunting. The high esteem in which Mr. Wright was held was much in evidence on the day of his funeral, when all shades and sections of the community were represented in the gathering which followed him to his last resting-place.

ARTHUR T. SAVAGE, B.A. CANTAB., L.R.C.P. AND S. EDIN., L.F.P.S. GLASG.

THE death of Mr. Arthur T. Savage is announced as having taken place at Olton, near Birmingham, on Feb. 26th, in his thirty-first year. He was the son of Dr. Thomas Savage, of Birmingham and was educated at Giggleswick Grammar School and Cambridge, where he graduated in arts. Subsequently he entered the medical profession and had just settled down to practice with every social advantage and opportunity for success. Of unobtrusive and quiet manners

Mr. Savage, by the simplicity of his life and gentle character, made many friends, giving every promise of a long and honourable career. Unfortunately the seeds of a former kidney trouble revived with acute symptoms and he succumbed after a few days' illness to an attack of Bright's disease in an intense form. He had married as recently as June last, which fact makes his death additionally sad.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.—The deaths of the following eminent foreign medical men are announced:—Dr. Love, Professor of Physiology in the Atlanta Medical College.—Dr. Max Podack, *privat-docent* of Internal Medicine in Königsberg.—Dr. Johann Conrad Busch, a great authority on medical practitioners' social relationships and on the question of sick clubs in relation to their medical officers. He died at Crefeld at the age of fifty years.—Dr. Gottfried Lenhartz, first-class *Oberstabsarzt* in the Prussian Army and co-editor with Dr. von Lenthold of the *Militärärztliche Zeitung*.—Dr. Hasse, Medical Privy Councillor of Brunswick, whose book on Overwork in Schools and its Relation to Insanity has been greatly read and discussed by school sanitarians all over the world. He was in his sixty-eighth year and prosecuted his medical studies in Göttingen.—Dr. Wilhelm Moldenhauer, Extraordinary Professor of Ear and Throat Diseases in Leipzig, at the age of fifty-two years.—Dr. Saenger, formerly Professor of Midwifery and Gynæcology in Groningen, at the age of sixty-four years.

Medical News.

ROYAL COLLEGE OF SURGEONS IN IRELAND: FELLOWSHIP EXAMINATION.—The following candidates, having passed the necessary examination, have been admitted Fellows of the College:—

Mr. F. Conway Dwyer, B.Ch., M.D. Univ. Dubl.; Miss E. E. Eberle, M.B., B.Ch., Royal Univ. Ireland; Mr. R. Friel, M.B., B.Ch. Univ. Dubl.; Mr. G. Jameson Johnston, M.B., B.Ch., Royal Univ. Ireland; Mr. A. J. Smith, L.R.C.P. and S.I.; Mr. H. T. J. Thacker, M.B., B.Ch. Edin.; and Mr. L. Werner, M.B., B.Ch. Univ. Dubl.

The following candidates have passed the primary part of the examination for the Fellowship of the College:—

Mr. T. G. Stevens, L.R.C.P. and S. Irel. and Mr. D. Hadden.

UNIVERSITY OF CAMBRIDGE.—At the congregation on Feb. 24th the following were admitted to the M.B. degree:—

George Crichton Jackson, B.A., St. John's; Walter Reginald Wilson, B.A., Corpus Christi; James Graham Forbes, B.A., Christ's; Richard Mathias, M.A., Christ's; John McDonald McCarthy, B.A., non-collegiate.

The first four of these were also admitted Bachelors of Surgery.—The late Mr. Frank Chance, M.B., has left by will a large selection of his books to the University Library.—The voting as to the suspension of the Professorship of Surgery and the appointment of a Reader will take place in the Senate on March 10th.

FOREIGN UNIVERSITY INTELLIGENCE.—*Amsterdam:* Dr. van Hoorn has been recognised as *privat-docent* of Dermatology.—*Berlin:* Dr. J. Pagel, *privat-docent* of the History of Medicine, has been granted the title of professor.—*Bonn:* Dr. R. Eschweiler has been recognised as *privat-docent* of Otology.—*Bordeaux:* Dr. André Moussons, *agrégé*, has been promoted to the Clinical Professorship of the Medical Diseases of Children; Dr. Hobbs has been appointed *professeur agrégé* of Medicine after a *concours*.—*Breslau:* Dr. K. Hürthle has been appointed Professor of Physiology in place of the late Dr. Heidenhain.—*Heidelberg:* It is intended next session to open a special department for Hydrotherapeutics in connexion with the medical clinic of the University. This will be the first department of the kind in any German university.—*Kharkoff:* Dr. Orloff, Extraordinary Professor of Clinical Surgery, has been promoted to be Ordinary Professor.—*Kieff:* Dr. Tomasevski has been appointed Professor of Syphilis and Dermatology in succession to the late Professor Stukovenkoff.—*Leipzig:* Dr. Perthes has been recognised as *privat-docent* of Surgery.—*Lille:* Dr. Carrière and Dr. Deléarde have been appointed *professeurs agrégés* of Medicine after a *concours*.—*Lyons:* Dr. Pic and Dr. Paviot have been appointed *professeurs agrégés* of Medicine.—*Montpellier:* Dr. Raymond and Dr. Vires have been appointed *professeurs agrégés* of Medicine.—*Paris:* Dr. Teissier, Dr. Thiroloix, Dr. Vaquez, Dr. Dupré, and Dr. Méry have been appointed *professeurs agrégés* of Medicine after the termination of a competitive *concours*.—*St. Petersburg (Medico-Chirurgical Academy):* Dr. W. Heinaz and Dr. W. Thiele have been recognised as *privat-docenten* in Surgery.—*Toulouse:* Dr. Frenkel has been appointed *professeur agrégé* of Medicine.—*Turin:* Dr. Carlo Forlanini has been appointed Professor of Medical Pathology.

YEOVIL HOSPITAL.—The annual meeting of Yeovil Hospital was held at the town hall on Jan. 12th, Major R. Aldworth presiding. The report stated that during 1897 there had been 112 admissions of in-patients with six deaths. The accounts which were submitted showed that the total receipts were £705 and that a balance of £9 remained in the hands of the treasurer. One of the medical officers, responding to a vote of thanks, said that there was no appliance in the town for conveying an injured person to the hospital and the necessity of an ambulance was referred to by other speakers.

CHESTER INFIRMARY.—The annual meeting of the governors of Chester Infirmary was held on Jan. 25th in the institution, Colonel Evans Lloyd presiding. The statistical report showed that the cases treated during 1897 were as follows: in-patients, 1284; out-patients, 4269; home patients, 2106; and district patients, 254; making a total of 7913. The daily average number of occupied beds throughout the year was 103. The ordinary income amounted to £5549 and the total ordinary expenditure to £5542. A new post-mortem room was built at a cost of £275. The Queen's long reign has been commemorated at the infirmary by painting, decorating, refurnishing, and reflooring one of the wards for females, which will in future be known as the "Queen's Ward." At the Convalescent Home there had been 251 admissions and one death.

COMPLIMENTARY DINNER TO DR. RAWDON.—On the evening of Feb. 26th Dr. Rawdon's medical friends entertained him at dinner at the Exchange Station Hotel, Liverpool, on the occasion of his retirement from hospital and private practice in Liverpool. Dr. Caton presided. The chairman and other speakers referred to Dr. Rawdon's long and honourable association with the Royal Southern Hospital, the Children's Infirmary, the Blue Coat School, and other charities. Mention was made of Dr. Rawdon's abilities as a surgeon and of the faithful and conscientious manner in which he had always devoted himself to the interests of his patients. He was complimented on his exceptional physical vigour and activity after a professional career which has almost reached forty years. The hope was expressed that he might enjoy the period of well-earned rest to which he is looking forward and which he proposes to spend in some rural part of the south of England. Appropriate vocal and instrumental music added to the interest of the evening.

HUNTERIAN SOCIETY.—The annual meeting of this society was held at the London Institution on Feb. 9th, the President, Dr. G. E. Herman, being in the chair. The following gentlemen were elected as office-bearers for the ensuing year:—President: Mr. J. S. E. Cotman. Vice-Presidents: Dr. S. H. Appleford, Dr. Frederick J. Smith, Mr. A. H. Tubby, and Dr. J. F. Woods. Treasurer: Dr. F. Charlewood Turner. Trustees: Dr. H. I. Fotherby and Mr. F. M. Corner. Librarian: Dr. T. Arnold Chaplin. Orator: Sir Hugh Beevor, Bart., M.D.Lond. Secretaries: Dr. Arthur T. Davies and Mr. J. H. Targett. Council: Mr. John Adams, Mr. A. Berrill, Dr. Bertrand Dawson, Dr. Fortescue Fox, Mr. A. W. Galloway, Mr. Hope Grant, Mr. W. A. Grogono, Dr. G. E. Herman, Dr. John W. Oliver, Dr. William Rawes, Mr. Henry J. Sequeira, and Dr. James H. Sequeira. Auditors: Mr. F. Gordon Brown, Mr. Hope Grant, Dr. T. Glover Lyon, and Dr. W. Rawes.—The society then adjourned to the theatre of the London Institution to hear the annual Hunterian Oration, which was published in THE LANCET of Feb. 19th, p. 510. At the conclusion of the Oration the President proposed a hearty vote of thanks to Dr. Horrocks, which was accorded with acclamation.—The annual dinner was held on Feb. 11th at the First Avenue Hotel, the President being in the chair. Sixty-six Fellows and guests were present.

LITERARY INTELLIGENCE.—The Calendar of the Victoria University for the year 1898 has just been issued and can be obtained in Manchester from Mr. J. E. Cornish, St. Ann's-square, and in London from Messrs. Macmillan and Co., price 1*s*.—The following new books will be issued very shortly: "A Manual of Bacteriology," by Dr. Hewlett, assistant in the Bacteriological Department at the British Institute of Preventive Medicine; "A Manual of General Pathology for Students and Practitioners," by Dr. Lazarus-Barlow, late Demonstrator of Pathology in the University of Cambridge; "A Manual of Dental Metallurgy," by Mr. Ernest A. Smith, Assistant Instructor in Metallurgy at the Royal College of Science, London. All three will be published by Messrs. J. and A. Churchill.

ROYAL FREE HOSPITAL.—The annual report of the Royal Free Hospital shows that there were 142 patients in the wards on Jan. 1st, 1897, and that 2020 were admitted during 1897, so that the total number of patients under treatment for the year was 2162, of whom 1798 were discharged, 214 died, and 150 remained in the wards on Dec. 31st, 1897. The daily average number in the wards was 143 and the average period of residence for each case was twenty-four days. There were also 18,578 out-patients and 16,549 casualties. The total expenditure for the year was £12,148 and the total income available to meet it was £10,138, so that there was a deficiency of £2010. The total number of students attending the London School of Medicine for Women, with which the hospital is associated, was 163 at the close of 1897; during the year 36 new students entered the school, of whom 31 are taking the full course of study. The festival dinner will be held at the Hotel Cecil on May 20th.

EPIDEMIOLOGICAL SOCIETY.—A meeting of this society was held on Feb. 18th, Professor J. Lane Notter, President, being in the chair. Surgeon-Captain Leonard Rogers, of the Indian Medical Service, read a paper on the Relation of Variations in the Level of the Ground Water to the Incidence and Seasonal Distribution of Malarial Fevers in India. On the conclusion of the paper, which will be published in THE LANCET on an early date, Dr. Manton said that the mosquito theory was not, as Surgeon-Captain Rogers thought, a mere inference from analogy between such different organisms as the filaria and the plasmodium, for he had seen the latter in the stomach and in the tissues of mosquitos, but they were essentially intra-corpuscular organisms and could not escape except in the blood corpuscles. Mauritius was formerly free from malaria and many South Sea Islands presented all the necessary physical conditions but were exempt and would be so until some form of plasmodium and the corresponding species of mosquito, of which there were hundreds, were both introduced.—Dr. K. McLeod, Dr. Pringle, Dr. Bulstrode, and the President also made some remarks, after which Surgeon-Captain Rogers replied.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.—A meeting of this society was held on Feb. 11th, Dr. E. Seaton, the President, being in the chair.—Mr. E. Sergeant read a paper on the Inspection of Cowsheds, submitting to the society resolutions in favour of uniform regulations throughout the country on the basis of model by-laws to be issued by the Local Government Board. It was proposed that the execution of these orders should be committed to the county councils, who might appoint qualified inspectors, or at any rate that the county council should have the power of compelling the local authorities to exercise an effective supervision of the cowsheds, &c., within their districts. After referring to the numerous and severe outbreaks of typhoid fever and other fevers clearly traced to milk supplies he expressed the opinion that the aggregate mortality from minor outbreaks and untraced sporadic cases, the fatal diarrhœa of infants and mesenteric tubercle, all in one way or another connected with milk, was far greater than that from the more alarming epidemics. Tried by the tuberculin test 15 to 50, in some places even 75, per cent. of the cows in different districts of Lancashire were proved to be affected. In Manchester and Salford dairy companies had been formed on the Copenhagen model, guaranteeing their milk to be the product of cows that had stood the tuberculin test, but he was not aware of this having been done elsewhere.—The paper was discussed by Dr. F. Bond (Gloucester), Dr. J. S. Cameron (Leeds), Dr. Newsholme (Brighton), Dr. Armstrong (Newcastle), Dr. E. F. Willoughby, Dr. Groves (Isle of Wight), Dr. Legge and others, after which Mr. Sergeant replied, and the resolutions were put and carried *nem. con.*

DR. A GARROD THOMAS, of Newport, Mon., has been made a Deputy Lieutenant for Monmouthshire.

VACCINATION GRANT.—Mr. H. P. Gilbert, L.R.C.P. Edin., M.R.C.S. Eng., of Aston Clinton, has received for the sixth time the Government grant for successful vaccination.

THE ROYAL BUCKINGHAMSHIRE HOSPITAL.—At the last meeting of the board of the Buckinghamshire General Infirmary it was decided that the institution should be called in future "The Royal Buckinghamshire Hospital."

CORNELIA HOSPITAL, POOLE.—The annual report of the Cornelia Hospital, Poole, showed that during 1897 the subscriptions amounted to £341 as against £214 in 1896. The fees from patients amounted to £68. The total expenditure was £1001 and the deficiency of £592 was made up, as in past years, by Lady Wimborne. 178 patients were cured and relieved, 8 died, and 25 were in the hospital on the last day of the year.

CHARING-CROSS HOSPITAL.—The annual meeting of Charing-cross Hospital was held in the hospital buildings on Feb. 16th, Lord Wantage presiding. The council's report stated that at the end of last year the institution was in the greatest possible financial difficulties and the buildings were mortgaged for debt. A special appeal for £100,000 was accordingly made, one half of that sum being required for maintenance and the other half for the new out-patient department, the nursing home, and the wards for special cases, as well as for providing better accommodation for the medical staff. The receipts for the past year were £57,091, including £19,463 from legacies and £2006 from the Prince of Wales's Fund. During the year there were 2017 in-patients, 11,800 out-patients, and 11,700 casualties. It had been decided that an officer should be appointed to guard against possible abuse of the out-patient department.

STOCKPORT INFIRMARY.—The annual meeting of the Stockport Infirmary was held in the institution on Feb. 9th, Mr. T. H. Sykes presiding. The report mentions that the present building, which was opened in 1833, has been enlarged on two occasions—namely, in 1871 and 1885. A further extension by the erection of an additional pavilion is in contemplation as a memorial of the Queen's long reign and will involve an outlay of from £8000 to £10,000, towards which about £7400 has been already promised. During 1897 there were 645 admissions of in-patients, 609 discharges, and 37 deaths; in addition to which there were 1404 out-patients; 773 home patients, 1325 accidents and 865 minor cases. The total receipts for 1897 were £3769 and the total expenditure was £3719. The average cost of each in-patient was £4 2*s*. 5*d*. and the average cost per head per week (staff and patients) was 5*s*. 9*d*.

ROYAL EAR HOSPITAL.—A successful performance of Mr. Pinero's domestic drama *Sweet Lavender* was given by the Pearl Assurance Musical and Dramatic Society at the Matinée Theatre, St. George's Hall, W., on Tuesday evening last in aid of the building fund of the Royal Ear Hospital. The interest in the charming little play was sustained throughout and all concerned in the performance are to be congratulated. The able acting of Miss Annie Linscotte as Lavender was greatly appreciated by the audience as was also that of Miss Amy Wilson in the *rôle* of the sympathetic Minnie. Mr. Herbert Rea's impersonation of the bibulous but virtuous Dick Phenyl was well conceived. The character of Horace Bream was perhaps a little overacted by Mr. Willis Clarke, but all who remember Mr. Fred Kerr's excellent impersonation of the young American will recognise that Mr. Clarke had a difficult task. Mr. William Blake played Clement Hale, Lavender's lover, with feeling; while Mr. George O'Hagan as Dr. Delaney infused the proper amount of warmth into his impersonation of the kind-hearted Irish physician. The rest of the cast included Miss Alice Taylor as Mrs. Gilfillan, Miss Clara Evans as Ruth Rolt, Mr. Lauri Foster as Wedderburn, Mr. Edward Gaskin as Maw, and Mr. Stanley Hall as Bulger.

THE London Hospital has received from the members of the Stock Exchange the sum of £6527 10s., collected in response to a special appeal on behalf of the hospital.

CARDIFF SANATORIUM.—At the meeting of the Health Committee of the Cardiff Corporation held on Feb. 22nd the plans were inspected and afterwards passed for the extension of the sanatorium. Three pavilions will be erected and there will be accommodation for sixty extra beds, making a total of 132 beds for the sanatorium. The cost is estimated at £24,000.

BRECON INFIRMARY.—The annual meeting of the Brecon County and Borough Infirmary was held on Feb. 15th, under the presidency of the Rev. Prebendary G. Williams. It was mentioned that the late Mr. J. Evans had given £100 to the institution. The report stated that the "Infirmary Jubilee Fund," which was adopted as the county fund for commemorating the Queen's long reign, now amounted to over a thousand guineas. This fund will be utilised for the provision of increased accommodation and appliances for the infirmary.

ROYAL WEST OF ENGLAND SANATORIUM, WESTON-SUPER-MARE.—The annual meeting of this convalescent home was held on Feb. 19th under the presidency of Mr. F. J. Fry, J.P. The financial statement showed that the receipts for 1897, including a balance of £667 remaining from 1896, amounted to £4140, and the expenditure was £2786. The number of convalescent patients admitted during 1897 was 1481 (780 men and 701 women), of whom 690 were discharged recovered, 350 were discharged much improved, and 8 were dismissed for intemperance. There were 3 deaths during the year.

MEDICAL MAGISTRATES.—Mr. Thomas S. Floyd, M.D. Dub., of Claughton, Birkenhead, and Mr. William Cotton Cornwall, L.R.C.P., L.R.C.S. Edin., of Birkenhead, have been appointed to the Commission of the Peace for Birkenhead.—Mr. John Mitchell, M.D. Glasg., of Silloth, has been appointed to the Commission of the Peace for Cumberland.—Mr. Wm. S. Mavor, M.D. Durh., L.R.C.P. Lond., M.R.C.S. Eng., of Waltham Cross, has been appointed to the Commission of the Peace for the County of Hertfordshire.—Mr. James Dickinson, M.B. Lond., of Bridgetown, West Australia, has been appointed a Justice of the Peace for that colony.

ROYAL BATH HOSPITAL, HARROGATE.—The annual meeting of the Royal Bath Hospital and Rawson Convalescent Home at Harrogate was held within the institution on Jan. 27th, the Honourable H. E. Butler presiding. The report presented by the honorary medical officer showed that the total number of cases, inclusive of readmissions, treated in the Royal Bath Hospital during 1897 has been 914. In addition to the foregoing there were 216 patients, including readmissions, treated in the Rawson Convalescent Home. Since the last annual meeting Mr. Butler offered to contribute £5000 to the Home endowment fund provided that the charges made for treatment in the Home were reduced and the conditions have been accepted by the Governors, the reduction taking effect from the beginning of 1898.

PRESENTATIONS TO MEDICAL MEN.—On the occasion of the distribution of certificates to the successful candidates of the Midland Railway Ambulance Class at the Sandon Dock Station on Feb. 17th Mr. J. A. Hendry, M.R.C.S. Eng., of Kirkdale, Liverpool, the honorary lecturer to the class, was the recipient of a walking-stick as a token of appreciation of his services.—At a meeting of the Great Northern Ambulance Class at Doncaster on Feb. 21st Mr. C. M. Hill, L.R.C.P. Lond., M.R.C.S. Eng., the lecturer of the class, was the recipient of a silver cigarette case, matchbox, and sovereign purse.—On Feb. 23rd the members of the Worksop detached class (a branch of the St. John Ambulance Association of the town) presented Mr. A. H. Montague, M.D. Durh., of Worksop, the instructor, with an aneroid barometer.—At the town hall, Yeadon, on Feb. 25th the members of the Yeadon Branch of the St. John Ambulance Association were entertained at tea by the invitation of Mr. J. Peate, the president, when Mr. C. J. R. McLean, M.D. Edin., the instructor to the class, was the recipient of a silver water-jug.

HARROGATE MEDICAL SOCIETY.—A general meeting of this society was held on Feb. 17th, the President, Mr. F. N. Ozanne being in the chair.—After the ordinary business of the meeting Mr. R. B. Anderson delivered an address on Medical Reform, commencing with a description of his personal experiences of the violation of professional rights. After having been mulcted in damages and costs and sent to prison to compel payment of them for exercising his right to retire from a case he recovered against the judge a verdict for substantial damages, but the Court of Appeal overruled the verdict, thereby denying him his remedy. He then traced the development of the claim that the General Medical Council and qualifying bodies are under an obligation to uphold the rights in return for which medical practitioners have paid their fees and he described the very active practical efforts of the Corporate and Medical Reform Committee to secure the combined action of the profession and thereby the reform of the General Medical Council and Medical Corporations.—Dr. Gordon Black then moved: "That this meeting of the Harrogate Medical Society expresses its cordial agreement with the work of the Corporate and Medical Reform Committee, as explained by Mr. Anderson, and undertakes to urge upon all its members the importance of doing all they can as individuals to support the movement." Dr. James Myrtle seconded the motion, which was carried unanimously.

DERMATOLOGICAL SOCIETY OF GREAT BRITAIN AND IRELAND.—At a meeting held on Feb. 23rd, Dr. J. F. Payne, President, being in the chair, Dr. A. Eddowes read a paper on a case of Ringworm contracted from a Hedgehog. The patient was a girl, fifteen years of age, who brought the animal wild from the country and made a pet of it. A fortnight later tinea circinata commenced on her chin and wrist, for which she consulted Dr. Eddowes fourteen days afterwards—i.e., a month from the arrival of the hedgehog. Dr. Eddowes removed and stained several of the white, slender, abdominal prickles of the hedgehog and in them he found identically the same fungus as he had found the day before in the scales removed from the patch on the patient's face. He had since heard of another case of a similar nature caught from another hedgehog. He also mentioned the case of another patient of his, a female, who had contracted favus in all probability from a monkey. The paper was illustrated by microscopic preparations, photographs, and lantern slides.—Various other cases and specimens were shown by Dr. J. H. Stowers, Dr. J. L. Bunch, Dr. P. S. Abraham, Dr. T. Savill, and Dr. A. Eddowes.—A letter was read from Professor A. Wolff, of Strassburg, inviting the members of the society to take part in the Congress of the Deutsche Dermatologische Gesellschaft to be held at Strassburg at Whitsuntide.—The following members took part in the discussion of the cases: the President, Mr. Hare, Dr. Stowers, Dr. Abraham, Mr. Pernet, and Dr. Savill.

ÆSCULAPIAN SOCIETY OF LONDON.—A meeting of this society was held on Feb. 25th, the President, Dr. B. G. Morison, being in the chair.—Dr. J. S. Risien Russell gave a lantern demonstration of specimens from the Spinal Cord in Locomotor Ataxy, Lateral Sclerosis, Insular Sclerosis, Ataxic Paraplegia of Gowers, the Sclerosis of Profound Anæmia, Degeneration due to a Tumour's Pressure and to a Fracture Dislocation.—Dr. G. Denton read notes of a case of Traumatic Cerebral Hæmorrhage in an alcoholic man who received a blow two inches above the left ear. He was picked up at once unconscious. On the second day with return to consciousness headache was complained of; on the third day double facial neuralgia was experienced; on the fourth day the temperature and the pulse were normal and the neuralgia was relieved; on the sixth day photophobia was present and occipital pain, which continued to the seventh day; on the eighth day the occipital pain had extended down the neck, the pulse was 60 and the temperature was 97° F.; on the ninth day he was free from pain, wished to get up and died suddenly in the afternoon. The post-mortem examination showed a blood clot weighing one and a half ounces adherent to the brain. There was no laceration of the brain. The viscera were not healthy.—Mr. W. Campbell M'Donnell related a case of Acute Neurasthenia in a woman, aged forty-six years, with fever lasting nineteen days and ranging between 100° and 103·6° F. for nine days. On recovering from this right basal pleurisy followed, with again much fever. The patient recovered completely.

ROYAL PORTSMOUTH HOSPITAL.—The annual general meeting of the Royal Portsmouth Hospital was held at the town hall on Feb. 25th. The report of the committee states that the past year was the most eventful in the history of the hospital since its foundation in 1847, having been distinguished by an event of the greatest importance—viz., the commencement of a new and enlarged building. This had been undertaken as the special feature in the local commemoration of the completion of the sixtieth year of the Queen's reign and a sum of over £15 500 had been raised. The foundation-stone of two blocks was laid on Aug. 7th, 1897, by H.R.H. the Duke of Connaught, K.G., and it is hoped that these will be ready for occupation at the end of 1898. The total number of patients treated during the year was 10 360, and of these 1241 were in-patients. The income amounted to £6194 12*s.* 6*d.* (including the handsome sum of £1080 from the Hospital Saturday collection), whilst the expenditure was £6885 1*s.* 6*d.* The committee appeal for generous support to enable them to carry on in its enlarged sphere of beneficent relief the work of one of the noblest charities which Portsmouth possesses.

HEALTH OF THE PORT OF FALMOUTH.—Dr. W. K. Bullmore, the medical officer for Falmouth and Truro Port Sanitary Authority, in his annual report for 1897 states that 791 ships, representing an aggregate of 425,372 tons, visited the port. There had not been any infectious or contagious disease brought into the district and there was comparatively very little sickness amongst the crews of vessels arriving. The total number of cases treated during the year at the Royal Cornwall Sailors' Home was 62, of whom 10 suffered from accidents and injuries, 10 from scurvy, 1 from fever, 15 from beri-beri, and 24 from minor ailments.

PREVENTABLE DISEASE.—The monthly dinner of the Article Club was held at the Hotel Cecil on Wednesday night, when an after-dinner discussion on "The Price of National Health" was introduced by Mr. Wolf Defries, the chairman. Mr. Defries said that, notwithstanding modern progress in sanitation and public health matters, among males in 1895 the six principal zymotic diseases accounted for nearly 8½ per cent. of the total mortality of the country, while tuberculosis accounted for 11 per cent. more. The minimum value of a life had been calculated by Dr. Farr at £159 per head for lives of all sexes and ages calculated on the basis of the average earnings of the agricultural labourer, from which the cost of his keep was deducted. Adopting this figure Mr. Defries showed that the country had lost in 1895 £17,000,000 through preventable diseases. Other figures taking into consideration the losses through sickness were quoted to show that the loss to the country amounted to nearly six times this enormous figure. Sir Douglas Galton, Dr. Saundby, Mr. M'Leod, M.P., Professor Corfield, and Professor Smith were among those present who took part in an interesting discussion.

Parliamentary Intelligence.

NOTES ON CURRENT TOPICS.

The Treatment of Habitual Drunkards.

THE Home Secretary intends very soon to introduce a Bill on this subject and has made it known that its operation will extend to Scotland.

Nursing in Scottish Prisons.

A deputation waited on the Secretary for Scotland on Monday, Feb. 28th, with reference to this subject and after expressing their views they received from Lord Balfour of Burleigh the intimation that the Government do not see their way to the appointment of the proposed departmental committee.

University of London Commission Bill.

The second reading stage of this Bill in the House of Lords was put down for Monday, Feb. 28th, and afterwards postponed until the following day, when it was again postponed.

HOUSE OF LORDS.

FRIDAY, FEB. 25TH.

The Plague in Bombay.

The Earl of Onslow, Under-Secretary of State for India, in reply to questions by Lord Reay, made a long statement on this subject. He explained that in Bombay city the plague and plague deaths were rapidly growing worse from Dec. 1st last until the week ending Feb. 11th of the present year. The number of reported plague deaths in Bombay city were, for instance, for the three weeks ending Jan. 28th, Feb. 4th, and Feb. 11th, 840, 1004, and 1220 respectively. The corresponding figures for last year were, on the other hand, 402, 607, and 803 only. The last telegram received from India contained, fortunately, better news. The deaths for the week ending Feb. 18th have fallen to 1136, or 84 less than in the previous week. This was the first time for ten weeks that the weekly telegram had not shown a progressive increase in the reported plague deaths in Bombay city. For the corresponding week in 1897 the figure was 849, as compared with the 1136 mentioned. But it must be pointed out that the Government of Bombay believe the plague deaths to be more strictly and more completely reported now than they were last year. Also, they estimate the present population of the city at 800,000 persons, as compared with about 450,000 last year, owing to panic and the exodus. Immense efforts were being made in a systematic way to combat the plague and prevent its spreading in the city and experience of successful plague campaigns elsewhere was being utilised. The Government, its officers, and the Governor himself were not sparing themselves. The hospitals were well organised, the supply of medical men and nurses was sufficient, reinforcements being sent from home at two or three days' notice whenever asked for. Ten more medical men went this week. In all 59 men and women doctors and 61 nurses have been sent. It was with deep regret that he had to inform their lordships that two of the lady nurses, Miss Morgan and Miss Macdougall, had died from plague during the performance of their duties. The Plague Committee had recently been strengthened and the superior skilled staff was nearly double that employed last year. In addition part of the detective staff were employed in research work. As an instance of the manner in which the Bombay Plague Committee carried out its work he mentioned that recently 16,600 houses were inspected during a single week, with the result that 600 plague cases were discovered. Camp accommodation was also ready for 8800 persons and was in course of construction for 15,000 persons, so that accommodation for 23,800 persons either had now been or will be provided. Twenty-nine hospitals were also open, containing 1011 cases. He might say that within the presidency of Bombay outside Bombay city, and even in Bombay city to some extent, as already explained, the plague had almost everywhere diminished; the measures taken against plague had improved and extended; while on the whole the people had come or were coming to acquiesce in or even sometimes to coöperate in anti-plague work. It was only in new places where plague operations first began that opposition occurred and only in a very few cases had any act of overt opposition been recorded. Constant precautions and inspections were taken through the agency of men and women doctors and other trustworthy officials on the railways and at seaports to prevent plague from being carried to other parts of India. So far these measures had succeeded in preventing the spread of the epidemic which had now raged for eighteen months in the Western Presidency. As to preventive inoculation against plague, this had been largely employed after the system of M. Haffkine, and the Government of India considered that the result of his experiments made at Damann was so encouraging that they were not without hope that protection might be proved to be possible by means of prophylactic inoculation. They thought that every opportunity should be taken to test its efficacy and local governments and administrations have been directed to procure a supply of serum for the use of persons who desire to have themselves inoculated. M. Haffkine himself has recently been instructed to proceed to Baroda to carry out inoculation there.

HOUSE OF COMMONS.

MONDAY, FEB. 21ST.

Irish Local Government Bill.

At this sitting of the House Mr. Gerald Balfour introduced the Bill of the Government for the reform of local administration in Ireland. The Bill follows very closely the lines of the recent legislation on this subject for England and Scotland. It proposes to bring into existence county councils and district councils, the former to perform the duties of the grand juries and the presentment sessions of the county and the latter those of the baronial presentment sessions. There is no provision for parish councils and the boards of guardians remain as at present with the *ex officio* element in their constitution eliminated. The suffrage adopted for the elections is the Parliamentary one with women and peers added. It is unnecessary in this column to go into the financial portion of the scheme beyond saying that provision is made for the payment of one-half of the salary of one trained nurse in every union in Ireland if actually employed and possessing the prescribed qualification. As regards lunatic asylums the Bill proposes that the Board of Control shall be abolished and that the appointment by the Lord Lieutenant of boards of governors and of officers of asylums shall cease. On this point this is what Mr. Gerald Balfour said in introducing the Bill: "It will hereafter be the statutory duty of county councils to provide and maintain sufficient accommodation for the lunatic poor in the county and to manage the lunatic asylum. For this purpose they will act through a committee of the council or, where an asylum district comprises more than one county, through a joint committee in which each council will be represented in proportion to the expenditure which it has to defray in connexion with the asylum. One-fourth of the members of a committee may be appointed from among persons other than county councillors. While the powers and responsibilities of county councils in connexion with lunatics will thus be considerably greater than those of existing boards of governors the ultimate control of the executive in cases where the county council fail to carry out their duties is sufficiently maintained by a variety of provisions, and though the appointment and removal of the officers will rest with the county council acting through their committee the concurrence of the Lord Lieutenant will be required in the case of a resident medical superintendent and in the case of the assistant medical officers."

The Use of the Treadwheel.

Mr. Lough asked the Home Secretary whether his attention had been drawn to the fact that a boy, aged eighteen years, named William Cooper, certified by the medical officer as fit to be placed on the treadwheel, was found dead in his cell at Norwich Gaol on Oct. 15th last, although he had not previously been ill, after being

subjected for a few days to the work; whether there had been other inquests on deaths arising from a similar cause; and whether, under these circumstances and seeing that the late Prisons Committee condemned the continuance of unproductive prison labour, the prison authorities of the Home Office intended to sanction the erection of new treadwheels.—Sir Matthew White Ridley said that he thoroughly inquired into this case at the time and found that there was no reason for supposing that the prisoner's death was the result of his work on the treadmill. The post-mortem examination revealed latent disease of old standing. There had been no similar case so far as he was aware. Treadmills were not necessarily or in all cases unproductive, but unproductive treadmills which could not be made productive were being generally abolished and the erection of new treadmills was not at present contemplated.

TUESDAY, FEB. 22ND.

Experiments on Living Animals.

Mr. Samuel Smith asked the Vice-President of the Committee of Council on Education whether the Education Department had sanctioned the use of text-books in the London board schools with regard to vivisection in which painful experiments on living animals and their result were described in detail without stating that such experiments were in any way exceptional.—Sir John Gorst replied that the Education Department did not sanction text-books used in elementary schools, but it had power to disallow any book that was considered unsuitable. The text-book referred to in the question would be obtained and the question whether its contents were suitable for the instruction of children considered.

The San José Scale Insect.

Mr. Long, in reply to a question by Mr. Morrell, said it was the case that Germany had prohibited the entry of fresh fruit from the United States because the San José scale insect (Aspidiatus perniciosus) had been found in some imported pears, and that the Hamburg Senate had granted permission for further export of consignments to England. The subject was being carefully considered by the Board of Agriculture and if he found that it was in their power to issue any advice or render any assistance to fruit-growers in the matter he would at once take steps to do so.

Royal Commission on Tuberculosis.

Mr. Chaplin, in the course of a reference to the action of certain meat inspectors, said he understood that the Royal Commission on Tuberculosis have under consideration whether some qualifications by way of passing an examination should not be prescribed in the case of persons empowered to make seizures of meat and he would very carefully consider any proposals that may be made by the Commission upon the subject.

Venereal Disease in the Army.

Mr. Brodrick, answering a question on this subject addressed to him by Major Rasch, said that ninety-two men of the 1st Battalion Royal Irish Fusiliers were found unfit for active service through venereal disease when the battalion was inspected at Alexandria on Feb. 7th. As to the Straits Settlements and other colonial stations where it had been proposed that the authorities should have power to make regulations for the protection of the soldiers no action had yet been taken. The subject had been referred to the military authorities by the Secretary of State and was still under consideration.

The Nutrient Qualities of Frozen Meat.

Mr. Powell Williams, Financial Secretary to the War Office, intimated, in the course of answering questions about the meat-supply of the army, that Professor James Long and Dr. Bernard Dyer, President of the Society of Public Analysts, have recently reported that frozen imported meat has equal nutritive qualities with home-fed meat and that there is no intention on the part of the Government of taking further scientific opinion upon the subject.

THURSDAY, FEB. 24TH.

The Recent Prevalence of Typhoid Fever at King's Lynn.

Mr. Thomas Bayley asked the President of the Local Government Board whether, with reference to the recent prevalence of typhoid fever at King's Lynn, any investigations had been made by the medical inspectors of the Local Government Board as to the cause of the outbreak; what action had been or was being taken by the Town Council with respect to the water supply; and whether the Town Council had carried out the recommendations of the Local Government Board's official (Dr. Bruce Low) in his report of 1892 to the Local Government Board; and whether public inquiries, where the witnesses were examined on oath, were held by the Board in such cases.—Mr. Chaplin replied: Inquiries were held by inspectors of the Local Government Board with reference to typhoid fever at King's Lynn in 1892 and last year and if it is desired there will be no objection to their reports being laid on the table of the House. The Town Council are now proceeding as rapidly as possible with a new scheme of water-supply and it is expected that the works will be completed in about four months. It is much to be regretted that the scheme was not carried out at an earlier date. With regard to the inspectors' recommendations as to sewerage the Town Council have proceeded with works for the improvement of the sewerage. It is the practice to direct investigations by medical inspectors of the Board when there are serious epidemics of typhoid fever. The facts in these cases are, however, ascertained by the inspector making detailed personal inquiries and as a general rule it has been found in practice that the necessary information is better obtained by these means than by a public inquiry.

Duties of Medical Men in Parliament.

Mr. D. A. Thomas asked the senior member for Oxford University whether it was customary for the Committee of Selection to exempt Members who are barristers or medical men in practice from sitting on private Bill committees; whether such exemption was made in accordance with any Standing Order or instruction of the House; if not, whether the courtesy was extended to any other class of business or professional men; and whether the exemption entailed a more frequent selection of other Members.—Sir John Mowbray, who is Chairman of the Committee of Selection, replied: No Member of the House has any right of exemption from service on Private Bill Committees, either by Standing Order or instruction of the House, but it has ordinarily been the custom of the Committee of Selection not to place on such committees members of the learned professions actively engaged in practice. Should, however, there be a difficulty in obtaining an adequate supply of Members qualified to serve the Committee of Selection would consider it their primary duty to call upon any Member to serve who in their judgment ought to take his part in those labours, even if such demand might involve a modification of the previous custom.

Dangers of the Match Industry.

Colonel Dalbiac asked the Home Secretary whether he was aware that the use of white phosphorus in the manufacture of matches had been prohibited by most foreign Governments; and whether he will take any steps to prohibit the use in this country of a substance so dangerous to the health of the workers in the match industry.—Sir M. White Ridley said he was not aware that this was so; on the contrary the information in his possession was that in some important countries at any rate—such as Germany, Austria, and Belgium—the use was not prohibited. In England the use of white phosphorus was regulated by special rules which had been so far successful that last year only two cases of phosphorus poisoning occurred, neither of which was fatal. In these circumstances he did not think there was a sufficient case for taking the action which his hon. friend suggested.

MONDAY, FEB. 28TH.

Viewing the Body at Inquests.

Sir M. White Ridley, replying to questions addressed to him by Mr. Yoxall with regard to the proposal to make optional the viewing of the body by coroners' juries, said that he had received the opinion of the Coroners' Society on the subject and it was opposed to any alteration of the law and that he did not think that he could with advantage take any further steps in the matter at present.

Sergeant-Majors of the Medical Staff Corps.

Mr. Brodrick, Under Secretary of State for War, said, in reply to a question, that when the Medical Staff Corps was formed in 1857 the pay of the sergeant-mayor was 4s. a day. Increases were made in 1861, 1873, and 1876, and in 1881 the sergeant-major was made a warrant officer with pay at 5s. 6d. a day. The warrant officers of the corps are eligible for commissions up to the age of forty years and in special cases up to the age of forty-five years.

TUESDAY, MARCH 1ST.

The Diagnosis of Rabies.

Mr. Walter Long, President of the Board of Agriculture, said, in reply to Sir Charles Dilke, that it had recently become necessary in connexion with their operations against rabies for the Veterinary Department to take over from the local authorities the duty of diagnosis where the local inspector was unable after post-mortem examination to express a definite opinion as to whether the animal was or was not rabid, a class of cases in which inoculation experiments had always been necessary. The work would be performed under the authority of licences under the Act of 1876, which for many years past it had been requisite should be held in the department in question for the purposes of the Diseases of Animals Acts. All the expenses which the work entailed were provided in the vote for the Board of Agriculture.

Promotion in the Army Medical Staff.

Sir Walter Foster asked the Under Secretary of State for War whether there was any rule in the Army Medical Department that surgeon-colonels who were over fifty-seven years were debarred from promotion to the rank of surgeon-major-general; if so, whether such a rule had ever been published; whether it had been applied to any officers; and if so, to how many; and whether if applied retrospectively any compensation had been, or would be, granted, as was the case when the age of retirement was altered by the warrant of 1858.—Mr. Brodrick replied that all promotions to the higher grades of the Army Medical Staff were by selection and consequently failure to be promoted was not a ground for compensation. It had been for some years the practice not to promote officers over the age of fifty-seven years to the rank of surgeon-major-general unless in very exceptional circumstances, as it was regarded as essential that an officer in that rank should have at least three years to serve. The rule had not been published and had applied so far to three officers.

Medical Examinations of Army Candidates.

Mr. Brookfield asked the Under-Secretary of State for War whether it was the case that candidates for commissions in the army were liable by existing regulations to be rejected on medical grounds after they had otherwise passed their examination, and whether, in view of the disappointment and years of useless study that might thus be involved, he would consider the desirability of sanctioning a preliminary medical examination of candidates for commissions in the army upon their paying a fee.—Mr. Brodrick replied that the whole conditions as to the medical fitness required were published and any candidate could at any period of his training ascertain by reference to a civil practitioner if he satisfied them. But the Secretary of State was willing to consider whether arrangements could not be made for a preliminary examination by a medical board in the case of candidates who might desire such an examination.

Distribution of Calf Lymph.

Dr. Tanner asked the President of the Local Government Board whether the calf lymph now used for vaccination was prepared with glycerine and if attention was being paid to the special commission appointed in Germany with the purpose of investigating the germicidal action of glycerine.—Mr. Chaplin replied: The calf lymph distributed by the Local Government Board is not prepared with glycerine. A

scheme for the preparation and distribution of glycerinated calf lymph is under consideration by the Board. Attention is being paid to the reports of the special commission referred to.

BOOKS, ETC., RECEIVED.

AILLIÈRE, J. B., ET FILS, Paris.
La Mort Subite Post-Opératoire. Par Dr. H. Harnaut. 1897.
De la Fonction de l'Urètre Hypogastrique chez les Prostatiques Cystostomisés. Par Dr. X. Delore. 1898.

AUERMEISTER, F., Glasgow.
Handbuch der Gynäkologie. Von J. Veit. III. Band. I. Hälfte. 1898.
Ergebnisse der Allgemeinen Pathologie und Pathologischen Anatomie des Menschen und der Tiere. Von O. Lubarsch und R. Ostertag. Dritter Jahrgang. 1896–1897.
Ueber das Vorkommen von Scharfbegrenzten Ektasien im Augengrunde und ueber partielle Farbenblindheit bei hochgradiger Myopie. Von Dr. L. Weiss. 1897.
Ueber das Wachstum des Menschlichen Auges und ueber die Veränderung der Muskelinsertionen am wachsenden Auge. Von Professor L. Weiss.

BLACK, A. AND C., Soho-square, London.
Who's Who? 1898. Edited by D. Sladen. Fiftieth year. 1898.

CASSELL AND CO., London.
The Century Science Series—Pasteur. By P. Frankland and Mrs. P. Frankland. 1898. Price 3s. 6d.

CHAPMAN AND HALL, Henrietta-street, Covent-garden, London.
British Columbia for Settlers—Its Mines, Trades, and Agriculture. By Frances Macnab. With Three Maps. 1898. Price 6s.

CHURCHILL, J. & A., Great Marlborough-street, London.
On Maternal Syphilis, including the Presence and Recognition of Syphilitic Pelvic Disease in Women. By J. A. Shaw-Mackenzie, M.D. Lond. 1898. Price 10s. 6d.

DOUGLAS, DAVID, Castle-street, Edinburgh.
A Handbook of Horse-shoeing. By J. A. W. Dollar, M.R.C.V.S., with the collaboration of A. Wheatley, F.R.C.V.S. 1893.

GIBBINGS AND CO., Bury-street, London, W.C.
Neo-Malthusianism: an Inquiry into that System with Regard to its Economy and Morality. By R. Usher. 1898. Price 6s.

GOOSE, A. H., Norwich.
Verses and Ballads. By T. E. Amyot, F.R.C.S. 1897.

GOVERNMENT PRINTING OFFICE, Washington.
Index Catalogue of the Library of the Surgeon-General's Office, United States Army—Authors and Subjects. Second Series. Vol. II. 1897.

JENKINS, W. R., New York.
The Clinical Diagnosis of Lameness in the Horse. By W. E. A. Wyman, V.S.

LEWIS, H. K., Gower-street, London, W.C.
Treatise on the Diseases of Women. By A. J. C. Skene, M.D., LL.D. Third Edition. Illustrated. 1898. Price 28s.

LONGMANS, GREEN AND CO., Paternoster-row, London.
The Annual Register and Digest, being a Classified Register of Charities in or available for the Metropolis. By C. S. Loch. 1898. Price 4s.

MACMILLAN AND CO., London.
The Study of Children and their School Training. By F. Warner, M.D. Lond. 1897. Price 4s. 6d. net.

PEARSON, C. A., Henrietta-street, London, W.C.
Exercise for Health—Its Science and Practice. By H. H. Hulbert and L. J. Phelan. 1898. Price 3s. 6d. net.

PENTLAND, YOUNG J., Edinburgh.
Text-book of Physiology. Edited by E. A. Shafer, LL.D., F.R.S. Vol. I. 1898.

PUBLISHED BY THE ASSOCIATION, Philadelphia.
Transactions of the American Orthopædic Association. Eleventh Session, May, 1897. Vol. X. 1897.

PUBLISHED BY THE OBSTETRICAL SOCIETY, Hanover-square, London.
Transactions of the Obstetrical Society of London. Vol. XXXIX., for the year 1897. Part IV. for October, November, and December. Price 10s.

SAMPSON LOW, MARSTON, AND CO., Fetter-lane, Fleet-street, London, E.C.
Twentieth Century Practice. Edited by T. L. Stedman, M.D. Vol. XII. Mental Diseases, Childhood and Old Age. 1897.

SWAN SONNENSCHEIN AND CO., London.
Epidemic Diphtheria: A Research on the Origin and Spread of the Disease from an International Standpoint. By A. Newsholme, M.D. Lond., M.R.C.P. Lond. 1898. Price 7s. 6d. net.
A Run Round the Empire: Being the Log of Two Young People who Circumnavigated the Globe. Written out by their Father. By A. Hill, M.A., M.D. Illustrated. 1897.

THE AMERICAN TECHNICAL BOOK COMPANY, Vesey-street, New York.
Cataphoresis, or Electric Medicamental Diffusion as Applied in Medicine, Surgery, and Dentistry. By W. J. Morton, M.D. 1898.

THE REBMAN PUBLISHING COMPANY, Adam-street, Strand, London.
A Clinical Text-book of Surgical Diagnosis and Treatment. By J. W. MacDonald, M.D. Illustrated. 1898. Price 28s.

WRIGHT, JOHN, AND CO., Bristol.
The Medical Annual and Practitioner's Index. 1898. Sixteenth year.
The Medical Examination for Life Assurance. By F. de Havilland Hall, M.D., F.R.C.P. 1898. Price 2s. 6d.

Vaccination a Delusion: its Penal Enforcement a Crime. By Alfred R. Wallace, LL.D. Dubl., D.C.L. Oxon. (Swan Sonnenschein and Co., Paternoster-square, London. 1898. Price 1s.).—The Truth about the Foreign Sugar Bounties: the Case for Abolition. Summarised by Mayson M. Beeton, B.A. Oxon. (Simpkin, Marshall, Hamilton and Co., London. 1898. Price 1s.).—Magazines, &c., for March: Strand Magazine, Boy's Own Paper, Girl's Own Paper, Leisure Hour, Sunday at Home, Ludgate Magazine, Westminster Review, Contemporary Review, Friendly Greetings, Chapman's Magazine, Myra's Journal, Pall Mall Magazine, Windsor Magazine, Cornhill Magazine, Blackwood's Magazine, Pearson's Magazine, English Illustrated Magazine, Knowledge, Humanitarian.

Appointments.

Successful Applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

ANDREWS, S., L.R.C.P. Lond., M.R.C.S., has been re-appointed Medical Officer for the Second Sanitary District of the Basingstoke Union.

BENNETT, WILLIAM B., M.R.C.S., L.R.C.P., has been appointed Assistant Resident Medical Officer to the Brownlow Hill Workhouse, Liverpool.

BRANSON, G. A., L.R.C.P. Edin., M.R.C.S., has been appointed a Public Vaccinator at Bendigo, Victoria, Australia, vice J. Amess, resigned.

BRYNE, W. S. C., M.B., Ch.M. Dubl., has been appointed a Member of the Queensland Medical Board, vice J. J. Mullen.

BURKE, A. St. L., L.R.C.P., L.R.C.S. Irel., has been appointed Medical Officer for the Bushbury Sanitary District of the Cannock Union.

COBB, J. F., M.R.C.S., has been appointed a Government Medical Officer and Vaccinator for the District of Rylstone, New South Wales, vice J. Eaton.

COLBY, J. G. E., M.B., B.Ch. Oxon., L.R.C.P. Lond., F.R.C.S., D.P.H. Camb., has been re-appointed Medical Officer of Health by the Norton Rural District Council.

DERMER, W. T., M.B. Univ. N.Z., has been appointed Officer of Health for East Fremantle, Western Australia.

DOWNIE, T. T., M.B., Ch.M. Glasg., has been appointed a Public Vaccinator at Clifton Hill, Victoria, Australia, vice A. A. Johnston, resigned.

FOLEY, J. E., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Medical Officer for the Collarendabri Hospital, New South Wales.

GAMBLE, H. W. B., L.R.C.S. Edin., L.S.A. Lond., has been appointed Acting Officer of Health for Creswick Shire, Victoria, Australia, vice W. Cory, resigned.

GEPP, M., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., D.P.H., has been re-appointed Medical Officer of Health for the Borough of Shrewsbury.

GIBBES, HENEAGE, formerly Lecturer on Physiology at the Westminster Hospital Medical School and afterwards Professor of Pathology at the Ann Arbor University, Michigan, has been appointed Health Officer to the City of Detroit.

GIBSON, J. L., M.D., Ch.M. Edin., M.R.C.S., has been appointed a Member of the Queensland Medical Board, vice H. Bell.

GILBERTSON, W., B.A., M.R.C.S., L.R.C.P., has been appointed Clinical Assistant to Out-patients to the Chelsea Hospital for Women.

HILL, REGINALD H., M.D. New York, L.S.A., has been appointed Assistant House Surgeon to the Derbyshire Royal Infirmary.

HOLDEN, J. F., M.B., C.M. Edin., has been appointed Medical Officer for the Fourth Sanitary District of the Preston Union.

JAMES, W. EVELYN, L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer and Public Vaccinator for the Parish of Mynyddislwyn by the Newport (Mon.) Board of Guardians.

JOHNSTON, A. A., L.K.Q.C.P. Irel., L.R.C.S. Edin., has been appointed a Medical Officer for the Destitute Poor and Aborigines within the District of Penola, South Australia.

KELSALL, H. T., M.D. Lond., has been appointed a Member of the Dental Board for Western Australia.

LISTER, A. H., M.B., C.M. Aberd., has been appointed Medical Officer to the Aberdeen Hospital for Incurables, vice C. T. D. Urquhart resigned.

LOVEGROVE, T. H., M.R.C.S., has been appointed a Member of the Medical Board for Western Australia.

MARTIN, ANTONY A., M.B., B.S. Lond.; M.R.C.S., L.R.C.P., has been appointed Assistant Medical Officer for the South-Eastern Fever Hospital, New Cross, London.

MARTIN, FRED. W., L.R.C.P., L.R.C.S. Edin., M.R.C.S., has been appointed Medical Superintendent of the Brighouse Joint Hospital for Infectious Diseases.

MCCLELLAND, W. C., M.B., M.Ch. Syd., has been appointed Medical Superintendent for the Sydney Hospital, New South Wales, vice E. H. Binney, resigned.

MIDDLEMASS, JAMES, M.A., M.B., C.M., F.R.C.P., has been appointed Medical Superintendent of the Sunderland Borough Asylum, vice F. A. Elkins.

MURRAY, J. IVOR, M.D. Edin., F.R.C.S., has been appointed an Honorary Medical Officer to the Royal Northern Sea Bathing Infirmary, Scarborough, vice J. W. Teale.

NUTTING, P. H., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Third Sanitary District of the Malmesbury Union.

ORD, W. W., M.D. Oxon., has been appointed Physician to the Salisbury Infirmary, vice G. G. Morrice, resigned.

PEET, J. H., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Medical Officer for the Eighth Sanitary District of the Basingstoke Union.

POGGIOLI, V., M.D., Ch.D. Univ. Bologna, has been appointed Medical Officer for the Barraba Hospital, New South Wales.

SAW, A. J. H., M.B., B.S. Cantab., has been appointed a Member of the Dental Board for Western Australia.

SPROTT, GREGORY, M.B., B.Ch. Glasg., has been appointed Officer of Health for the District of Queenborough, Tasmania.

TAYLOR, S. T., M.B. Lond., L.R.C.P., M.R.C.S., has been re-appointed a Medical Officer by the Chingford Urban District Council.

TENCH, S. E., M.R.C.S., L.R.C.P., has been appointed Clinical Assistant to Out-patients to the Chelsea Hospital for Women.

THURNELL, H. L., L.R.C.P., M.R.C.S. has been re-appointed Medical Officer of Health for the Borough of Gravesend.

TRATMAN, F., M.D. Lond., D.P.H., has been appointed a Member of the Dental Board for Western Australia.

TRUMPER, O. B., M.B., Ch.B. Vict., has been re-appointed a Medical Officer by the Market Rasen Urban District Council.

WADD, H. RANDALL, M.R.C.S., L.R.C.P. Lond., has been appointed Anæsthetist to the Great Northern Central Hospital, Holloway-road, N.

WALLACE, A., M.D. Oxon., M.R.C.P. Lond., has been appointed an Honorary Physician to the Essex and Colchester Hospital.

WISE, H. M., M.B. Lond., L.R.C.P., M.R.C.S., has been appointed Medical Officer for the Plumstead Sanitary District of the Woolwich Union.

WOODCOCK, H. B., M.B., Ch.B. Vict., has been appointed an Assistant Medical Officer for the Salford Union Infirmary at Hope.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

BRECON INFIRMARY.—Resident House Surgeon, unmarried, who will also undertake Dispensing. Salary £70 per annum, with furnished apartments, board, attendance, fire, and gas. Three months notice.

CITY OF LONDON ASYLUM, near Dartford, Kent.—Second Assistant Medical Officer, unmarried. Salary £100 a year, with board, lodging, washing, and attendance. Applications to the Clerk to the Visiting Committee, Guildhall, E.C.

COTON HILL REGISTERED HOSPITAL FOR MENTAL DISEASES.—Assistant Medical Officer. Salary £100 per annum, with two annual increases of £25 each to a maximum of £150, with board, lodging, and washing.

DENTAL HOSPITAL OF LONDON, Leicester-square.—Three Assistant Anæsthetists.

DURNESS, SUTHERLANDSHIRE.—Medical Officer. Guaranteed salary £150 per annum, with practice. Free house and garden. Applications to Inspector of Poor, Durness, N.B.

FINSBURY DISPENSARY, Brewer-street, Goswell-road, E.C.—Physician. An honorarium of £40 will be paid during the pleasure of the Committee.

FISHERTON ASYLUM.—Assistant Medical Officer, unmarried. Salary £100 a year, with board, lodging, and washing. Applications to Dr. Finch, Salisbury.

GENERAL INFIRMARY AT GLOUCESTER AND THE GLOUCESTERSHIRE EYE INSTITUTION.—House Surgeon. Salary £100 per annum, with board, residence, and washing. Also Assistant House Surgeon. Board, residence, and washing provided.

GLASGOW EYE INFIRMARY.—Resident Assistant House Surgeon. Salary £50, with apartments and board.

GOLD COAST AND LAGOS COLONIES.—Appointments in the Government Medical Service. Initial salary £350 a year, with free quarters (or allowances in lieu thereof) and free passage. Applications to be addressed to the Assistant Private Secretary, Colonial Office, London.

GUARDIANS OF ST. MARY, Islington.—Resident Second Assistant Medical Officer, who is also to act as Dispenser at the Workhouse and Infirmary, St. John's-road, Upper Holloway, and Temporary Medical Officer of the Highgate-hill Temporary Workhouse. Salary £80 per annum, and rations, apartments, and washing, subject to statutory deductions. Applications to the Clerk, Guardians' Offices, 131, St. John's-road, Upper Holloway, N.

GUEST HOSPITAL, Dudley.—Assistant House Surgeon, for six months. Board, lodging, and washing in the hospital provided.

LIVERPOOL DISPENSARIES.—Assistant Surgeon, unmarried. Salary £80 for the first year and £90 per annum afterwards, with apartments, board, and attendance. Applications to the Secretary, 34, Moorfields, Liverpool.

LONDON TEMPERANCE HOSPITAL, Hampstead-road, N.W.—Assistant Resident Medical Officer, for six months. Residence in the hospital, board, and washing provided, and an honorarium given conditionally.

METROPOLITAN HOSPITAL, Kingsland-road, N.E.—House Physician, House Surgeon, Assistant House Physician, and Assistant House Surgeon, for six months. The House Physician and House Surgeon will each receive a salary at the rate of £40 a year. The Assistant House Physician and Assistant House Surgeon will each receive a salary at the rate of £20 a year.

NORFOLK AND NORWICH HOSPITAL.—House Physician, for two years, unmarried. Salary £60 per annum, with board, lodging, and washing.

NORTH LONDON HOSPITAL FOR CONSUMPTION, Hampstead, N.W.—Resident Medical Officer for one year. Honorarium £40 per annum, with board, lodging, &c., in the hospital. Applications to the Acting Secretary, Offices, 44, Fitzroy-square, W.

NOTTINGHAM GENERAL DISPENSARY.—Assistant Resident Surgeon. Commencing salary £140 per annum.

PARISH OF ST. GILES, Camberwell.—Assistant Medical Officer for the Infirmary at Havil-street, Camberwell, and the Workhouse at Gordon-road, Peckham; also for relief duty at the Constance-road Workhouse of the Parish for one year. Salary £50, with apartments, board, and washing. Applications to the Clerk to the Guardians, 29, Peckham-road, S.E.

PORTSEA ISLAND UNION.—Resident Assistant Medical Officer for the Infirmary, Workhouse, and Schools. Salary at the rate of £150 per annum, rising £10 per annum to a maximum of £200 per annum, with rations and furnished apartments, subject to statutory deductions. Applications to the Clerk to the Guardians, 1, St. Michael's-road, Portsmouth.

ROTHERHAM HOSPITAL AND DISPENSARY.—Assistant House Surgeon. Salary £30 per annum, with board and washing.

ROYAL FREE HOSPITAL, Gray's-inn-road, London.—Senior Resident Medical Officer for twelve months. Salary £100 per annum, with board, residence, and washing.

ROYAL HALIFAX INFIRMARY.—Acting Honorary Ophthalmic Surgeon.

SIERRA LEONE GOVERNMENT RAILWAY.—Assistant Medical Officer. Salary £30 per month. First-class passage out and home. Full salary from date of arrival; half-pay during voyages. Quarters or allowance in lieu thereof. Applications to the Crown Agents for the Colonies, Downing-street, London.

TEIGNMOUTH HOSPITAL, South Devon.—House Surgeon, to act also as Secretary. Salary £60, with board and lodging.

UNIVERSITY OF LONDON.—Examiners.

WORCESTER COUNTY AND CITY LUNATIC ASYLUM, Powick, near Worcester.—Third Assistant Medical Officer, unmarried. Salary £100 per annum, rising to £120 in a year, with board, lodging, and washing.

Births, Marriages, and Deaths.

BIRTHS.

BAYLOR.—On Feb. 25th, at Chilton House, Ash, near Dover, the wife of E. A. C. Baylor, B.A., M.D., T.C.D., of a daughter.

BELL.—On Feb. 16th, at Winckley-square, Preston, the wife of Frederick Bell, M.R.C.S., L.R.C.P., of a son.

GORDON.—On Feb. 21st, at Hackney Union Infirmary, the wife of J. J. Gordon, L.R.C.P., L.R.C.S. Edin., of a son.

JOHNSTON.—On Feb. 24th, at Drumsheugh-gardens, Edinburgh, the wife of Robert McKenzie Johnston, M.D., F.R.C.S.E., of a son.

LONGTON.—On Feb. 24th, at Barford, Warwick, the wife of G. H. Longton, M.R.C.S., L.R.C.P., of a son.

MACKLEY.—On Feb. 24th, at Salisbury, the wife of E. H. A. Mackley, L.D.S., of a daughter.

MEYER.—On Feb. 24th, at Amwell-place, Hurstpierpoint, Sussex, the wife of W. R. Meyer, L.S.A. Lond., of a son.

O'CALLAGHAN.—On Feb. 24th, at 137, Harley-street, W., the wife of Robert O'Callaghan, F.R.C.S. Irel., of a daughter, who only survived her birth some hours.

STREATFEILD.—On Feb. 26th, at Cheriton-road, Folkestone, Florence Ethel, the wife of Thomas Streatfeild, M.B., of a son.

MARRIAGES.

MACMILLAN—FAED.—On Feb. 22nd, at St. Cuthbert's Parish Church, David Macmillan, M.A., M.D., Prestwich, Lancashire, to Mary, younger daughter of Mr. James Faed, Edinburgh.

MOSS—PEARSE.—On Dec. 31st, 1897, at Antananarivo, Madagascar, by the Rev. J. Sibree, F.R.G.S., assisted by the Rev. J. Wills, C. F. Arrowsmith Moss, M.B., C.M. Edin., of Antananarivo, to Rosa Mary, daughter of the Rev. J. Pearse, of Fianarantsoa, Madagascar.

DEATH.

WHITE.—On March 2nd, Octavius Mark White, M.R.C.S., of Kingsdene, Eltham, Kent, aged 44 years.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY (7th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (2 P.M., Ophthalmic 1.15 P.M.), St. Mary's (2.30 P.M.), Middlesex (1.30 P.M.), St. Mark's (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), Westminster (2 P.M.).

TUESDAY (8th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.), Metropolitan (2.30 P.M.).

WEDNESDAY (9th).—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), St. Mary's (2 P.M.), National Orthopædic (10 A.M), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.), Westminster (2 P.M.), Metropolitan (2.30 P.M.).

THURSDAY (10th).—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (1.30 P.M.), St. Mary's (2.30 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.), Metropolitan (2.30 P.M.).

FRIDAY (11th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), St. Mary's (2 P.M., Ophthalmic 10 A.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.).

SATURDAY (12th).—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 A.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), St. Mary's (10 P.M.), Cancer (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES.

MONDAY (7th).—MEDICAL SOCIETY OF LONDON.—8.30 P.M. Mr. J. H. Morgan: The Affections of the Urinary Apparatus in Children. (Lettsomian Lecture.)

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN (40, Leicester-square, W.C.).—Papers:—Mr. G. Brunton: The Rationale of the Strip Matrix.—Mr. J. F. Colyer: Formalin in the Treatment of Pulps. Casual Communications:—Mr. F. W. Richards: An Odontome removed from the Mandible. Also by Mr. A. F. Colyer.

TUESDAY (8th).—ROYAL MEDICAL AND CHIRURGICAL SOCIETY (20, Hanover-square, W.).—8.15 P.M. Dr. N. Moore will show Two Adult Brothers with Symptoms of Disease of the Lateral Columns of the Spinal Cord of which the first Indications were observed shortly before Puberty. Dr. J. Griffiths: Microcephaly and its Surgical Treatment, with notes of a case.—Mr. C. T. Dent: Removal of the entire Upper Extremity for Recurrent Carcinoma after Removal of the Breast.

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN (17, Bloomsbury-square, W.C.).—8 P.M. Papers:—Prof. H. G. Greenish and Mr. H. Wilson: The Pharmacy of Cantharides.—Mr. E. M. Holmes: Recent Additions to the Museum.

WEDNESDAY (9th).—MEDICAL SOCIETY OF LONDON.—7.30 P.M. Anniversary Dinner at the Whitehall Rooms, Hôtel Métropole.

DERMATOLOGICAL SOCIETY OF LONDON (11, Chandos-street, Cavendish-square, W.).—5.15 P.M. Exhibition and Discussion of Clinical Cases.

SOCIETY OF ARTS.—8 P.M. Prof. J. Ewing: Linde's Method of Producing Extreme Cold and Liquefying Air.

LARYNGOLOGICAL SOCIETY OF LONDON (20, Hanover-square, W.).—5 P.M. Cases and Specimens will be shown by Mr. Stewart, Mr. Roughton, Dr. H. Tilley, Dr. Lack, Dr. Thomson, Mr. P. T. Walker, Mr. Symonds, Dr. Waggett, Mr. Walsham, Dr. Willcocks, Dr. Thorne, Dr. W. Hill, and Sir Felix Semon.

MEDICAL SOCIETY OF UNIVERSITY COLLEGE (London).—8.30 P.M. Mr. P. Flemming: Some Applications of Anatomy to Ophthalmic Practice.

THURSDAY (10th).—OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM (11, Chandos-street, Cavendish-sq., W.).—8 P.M. Card Specimens will be shown by Mr. Rockliffe, Mr. H. Fisher, Mr. Cargill, Mr. A. S. Mortou, and Mr. C. D. Marshall. 8.30 P.M. Papers:—Dr. A. MacGillivray: The Aseptic Treatment of Wounds in Ophthalmic Surgery.—Mr. M. Gunn: On Ophthalmoscopic Evidence of General Arterial Disease.—Mr. P. Flemming: A Case of Retinitis Proliferans in which the Eye was Examined after Death.

BRITISH GYNÆCOLOGICAL SOCIETY (20, Hanover-square, W.).—8.30 P.M. Specimens of Sarcoma of the Ovary will be shown by Mr. F. B. Jessett, Dr. G. Elder (Nottingham), and Dr. Jellett (Dublin). Card Specimens by Mr. Jessett and Dr. Elder. Dr. G. Newman: Demonstration on Micro-organisms in Relation to the Female Genital Organs, illustrated by lantern slides and microscopic specimens. Paper:—Dr. W. Alexander (Liverpool): Enucleation of Uterine Fibroids (illustrated by lantern slides).

NORTHUMBERLAND AND DURHAM MEDICAL SOCIETY (Newcastle-on-Tyne).—Dr. G. Stoker: Oxygen Treatment.

FRIDAY (11th).—CLINICAL SOCIETY OF LONDON (20, Hanover-square, W.).—8.30 P.M. Papers: Mr. D. Newman: Cases of Malformation of the Kidney and Displacement without Mobility.—Mr. F. C. Wallis: Three Cases of Perforating Wound of the Knee Joint.—Dr. G. A. Sutherland and Mr. W. Watson Cheyne: A Case of Chronic Hydrocephalus treated by Intracranial Drainage.

LECTURES, ADDRESSES, DEMONSTRATIONS, ETC.

MONDAY (7th).—ROYAL COLLEGE OF SURGEONS.—5 P.M. Prof. C. Stewart: On the Vertebral Column, and some additions to the Museum.

LONDON POST-GRADUATE COURSE.—London Throat Hospital, Gt. Portland-st., W., 8 P.M., Dr. G. Stoker: Impaired Movements of the Vocal Cord.

THE SANITARY INSTITUTE (Parkes Museum, Margaret-street, W.).—8 P.M. Prof. A. Bostock Hill: Trade Nuisances.

TUESDAY (8th).—WEST-END HOSPITAL FOR DISEASES OF THE NERVOUS SYSTEM (73, Welbeck-street).—4.30 P.M. Dr. H. Campbell: On Disorders of Reflex Action and Trophic Lesions in Disorders of the Nervous System.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Bloomsbury).—3.30 P.M. Mr. Ballance: Surgery of the Nervous System.

LONDON POST-GRADUATE COURSE.—Bethlem Hospital, 2 P.M., Dr. Craig: Delusional Insanity; Paranoia.—Hospital for Skin Diseases, Blackfriars, 4.30 P.M., Dr. Abraham: Drug Eruptions.

ROYAL INSTITUTION.—3 P.M. Prof. E. Ray Lankester: The Simplest Living Things.

WEDNESDAY (9th).—ROYAL COLLEGE OF SURGEONS.—5 P.M. Prof. C. Stewart: On the Vertebral Column, and some additions to the Museum.

LONDON POST-GRADUATE COURSE.—Parkes Museum, Margaret-st., W., 4.30 P.M., Prof. A. Wynter Blyth: Sources of Water.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST (Brompton).—4 P.M. Dr. Kidd: Cases of Laryngeal Tuberculosis.

EVELINA HOSPITAL (Southwark-bridge-road, S.E.).—4.30 P.M. Mr. G. H. Makins: Selected Surgical Cases. (Post-Graduate Course.)

WEST LONDON POST-GRADUATE COURSE (West London Hospital, W.).—5 P.M. Dr. G. D. Robinson: Gynæcological Cases.

THURSDAY (10th).—CHARING-CROSS HOSPITAL.—4 P.M. Mr. Gibbs: Demonstration of Surgical Cases. (Post-graduate Class.)

THE HOSPITAL FOR SICK CHILDREN (Gt. Ormond-street, W.C.).—4 P.M. Dr. Dickinson: Demonstration of Selected Cases.

LONDON POST-GRADUATE COURSE.—Central London Sick Asylum, Cleveland-st., W., 5.30 P.M., Dr. A. E. Sansom: Clinical Lecture on Mitral Stenosis with especial reference to Recent Investigations.

THE SANITARY INSTITUTE (Parkes Museum, Margaret-street, W.).—Dr. J. F. J. Sykes: Objects and Methods of Inspection, Nuisances, &c.

ROYAL INSTITUTION.—3 P.M. Prof. J. A. Fleming: Recent Researches in Magnetism and Diamagnetism.

LONDON TEMPERANCE HOSPITAL.—2 P.M. Dr. S. Fenwick: Clinical and Pathological Demonstration to Senior Students.

FRIDAY (11th).—ROYAL COLLEGE OF SURGEONS.—5 P.M. Prof C. Stewart: On the Vertebral Column, and some additions to the Museum.

LONDON POST-GRADUATE COURSE.—King's College, 3 to 5 P.M., Prof. Crookshank: Tuberculosis and Leprosy.

ROYAL INSTITUTION.—9 P.M. Mr. W. F. Lord: Marked Unexplored.

EAST LONDON HOSPITAL FOR CHILDREN (Shadwell, E.).—4 P.M. Dr. M. Fletcher: Nutritional Changes in the Skeleton occurring in Early Life.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, March 3rd, 1898.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Rainfall.	Solar Radia in Vacuo.	Maximum Temp. Shade.	Min. Temp.	Wet Bulb.	Dry Bulb.	Remarks at 8.30 A.M.
Feb. 25	30·11	W.	0·12	64	49	31	32	33	Hazy
,, 26	30·01	S.W.	0·02	83	51	33	37	38	Cloudy
,, 27	30·07	S.W.	0·16	65	49	38	42	43	Raining
,, 28	29·96	W.	...	75	49	36	37	38	Hazy
Mar. 1	29·72	S.W.	0·13	80	54	38	43	44	Cloudy
,, 2	29·64	N.W.	...	63	48	37	38	41	Cloudy
,, 3	29·75	W.	...	71	46	33	34	35	Hazy

During the week marked copies of the following newspapers have been received: *Hull News, East Anglian Daily Times, Western Morning News, Carlisle Express, Barnsley Independent, Bury Guardian, Blackburn Standard, Glasgow Herald, Times of India, Montreal Daily Star, Boston Independent, Pioneer Mail, Huddersfield Examiner, Newbury Weekly News, Temperance Record, Midland Free Press, Grantham Journal, Elgin Courant, Toronto Daily Mail, Architect, Derbyshire Courier, Norfolk Chronicle, Cambria Daily Leader, Builder, Yorkshire Post, London Argus, Scotsman, Liverpool Daily Post, Manchester Courier, Newcastle Chronicle, Leeds Mercury, Sheffield Telegraph, Bradford Observer, Newport Advertiser, Bristol Mercury, Citizen, Chester Chronicle, Louth News, Birmingham Gazette, Sussex Daily News, Bridgwater Independent, North Wales Chronicle, St. Andrew's Citizen, Worcester Chronicle, Hereford Times, Kent Messenger, Essex County Standard, Oban Times, Devon Weekly Times, Brighton Gazette, Sanitary Record, City Press, Hertfordshire Mercury, Reading Mercury, Local Government Chronicle, Mining Journal, Local Government Journal, Berwick Journal, Belper and Alfreton Chronicle, Surrey Advertiser, Australasian Medical Gazette, Advocate of India, Bombay Health News, Weekly Free Press and Aberdeen Herald, Liverpool Courier, Friendly Societies' Recorder, Western Mail, National Righteousness, Wolverhampton Chronicle, Poole, Parkstone, and East Dorset Herald, Kentish Observer, Dereham and Watton Standard, &c., &c.*

Notes, Short Comments, and Answers to Correspondents.

EDITORIAL NOTICE.

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side of the paper only, AND, WHEN ACCOMPANIED BY BLOCKS, IT IS REQUESTED THAT THE NAME OF THE AUTHOR, AND IF POSSIBLE OF THE ARTICLE, SHOULD BE WRITTEN ON THE BLOCKS TO FACILITATE IDENTIFICATION.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *should be addressed "To the Manager."*

We cannot undertake to return MSS. not used.

MANAGER'S NOTICE.

THE INDEX TO THE LANCET.

THE Index to Vol. II. of 1897, which was completed with the issue of Dec. 25th, and the Title-page to the Volume, were given in THE LANCET of Jan. 1st.

VOLUMES AND CASES.

VOLUMES for the second half of the year 1897 are now ready. Bound in cloth, gilt lettered, price 1*s.*, carriage extra.

Cases for binding the half-year's numbers are also ready. Cloth, gilt lettered, price 2*s.*, by post 2*s.* 3*d.*

To be obtained on application to the Manager, accompanied by remittance.

THE SCOTCH FORM OF OATH.

MR. F. J. MUNBY, the magistrate's clerk for the city of York, recently entertained the members of the city police force and sundry other officials at a tea in the central hall of the exhibition. Mr. Munby, in a speech made afterwards, referred to the necessity of impressing upon children regard for the truth. Children were gradually becoming less truthful. He thought that a good way of teaching children to be truthful would be that in every elementary school they should be instructed to appreciate the Scotch form of oath, a form which he very much preferred for use in court.

A SURGICAL SHIRT AND BEDGOWN.

WE have received from Messrs. John Weiss and Sons, of 287, Oxford-street, specimens of a garment invented by Miss Webb, of Clifton, with the object of facilitating such access to the body of a patient as may be required by the physician or surgeon. The garment is in the form of an ordinary shirt, but in addition to the usual opening from the neck down the front, the sleeves and yoke are made to open from the collar-band to the wrist-band, the sides from underneath the axilla to the lappets, and the back from the collar-band to a point two-thirds of the length of the shirt. These openings are kept closed by small linen buttons. The object aimed at is a good one, but it seems to us that while the work of the physician, surgeon, or nurse might be facilitated discomfort and inconvenience to the patient would be increased. The fastening of the buttons, which are very small, would tend to irritate many patients, and, moreover, would hurt a patient if he or she should happen to lie upon them with their sharp edge in contact with the body. Tapes in place of the buttons would do away with this latter objection, but even then the time it would take to properly close the garment would contraindicate the use of such a garment except perhaps in some exceptional cases.

A SMOKE DISTRIBUTING MOUTHPIECE.

WE have received specimens of a pipe and cigar-holder constructed according to the patent of the Smoke Distributing Mouthpiece Company, Limited. The principle of the mouthpiece is that the stem-bore as it approaches the mouth end gives off four branches instead of terminating in one orifice. In this way it is claimed that the smoke is distributed equally over the mouth, which it reaches in a cooler condition than when the bore is a direct tube of communication between the burning tobacco impinging upon one spot on the tongue. In the "Smoke Distributing Mouthpiece" the smoke enters the mouth through four lateral openings, of which the central two are smaller than the two lateral ones. In this way all the smoke reaches the mouth at the same time and the large proportion of it has a greater space in which to get cool. The inventors have added to their claim such very extensive promises as these: that in their pipes nicotine never accumulates and that the tobacco at the bottom of the bowl never becomes moist—concerning which we think it right to say that they protest too much. But for coolness and ease of drawing we can recommend the Smoke Distributing mouthpiece.

STRYCHNINE POISONING.

To the Editors of THE LANCET.

SIRS,—Thirty years' seclusion in country practice is apt to make one's books not up to date. My "Taylor" does not afford me information on the following points, which perhaps you or your readers will kindly supply: 1. What is the longest time that strychnine has been discovered after death? 2. How long can traces of strychnine poisoning be traced?

I am, Sirs, yours faithfully,

Feb. 22nd, 1898. L. N.

"VICTOR LIQUID COFFEE."

THE patentees and sole manufacturers of this preparation (The Duke's Patents Co., 20, High Holborn, W.C.), which was noticed in our Analytical Records last week, take exception to the last sentence in the report which states that "aromatic oils are necessarily absent." This conclusion was based upon the fact that the liquid coffee yielded a perfectly clear solution in hot water, no appearance of oils being observed. It appears, however, that "caffeol," the essential oil of coffee, though insoluble in cold water is distinctly soluble in hot, and on extracting the liquid coffee with ether we have since obtained a very good yield of the aromatic oils of coffee. This confirms, therefore, the satisfactory opinion which we expressed in regard to the flavour and aroma of the coffee prepared from the extract.

THE ETIOLOGY OF ENDOCARDITIS IN INFANCY.

To the Editors of THE LANCET.

SIRS,—I shall be greatly obliged if any of your readers can give me any information concerning the etiology of endocarditis in infancy, or rather before birth. A few days ago I made a necropsy in the case of an infant, aged three weeks, and found acute endocarditis of the right side and one of the chordæ tendineæ ruptured. There were also numerous petechial hæmorrhages on the surface of the heart in a zone corresponding to the right auriculo-ventricular septum. The few text-books to which I have been able to refer speak of endocarditis on the right side as very rare and only commencing in utero without further comment. There is nothing of interest in the mother's history in this case; the child was born at full term and was otherwise healthy.

I am, Sirs, yours faithfully,

Feb. 27th, 1898. P. W.

THE NOTIFICATION OF PUERPERAL FEVER.

WE published in THE LANCET of Feb. 12th a letter from "Inquirer" asking whether all cases of peritonitis occurring at childbirth should be reported as cases of puerperal fever under the Notification Act from whatever cause arising. He had a case "where there appeared to have been inflammation before the labour came on and where, as a consequence of having to detach an adherent placenta, unmistakeable peritonitis set in with great severity *immediately* after." We should say that certainly all cases of peritonitis occurring after childbirth should be notified. In the case in question the peritonitis, according to "Inquirer" himself, only became unmistakeable after an intra-uterine manipulation — detaching an adherent placenta — and the probability would certainly be that a causal relation between the two things existed. Of course there is no definite malady entitled to be called "puerperal fever" in the same sense that typhoid or small-pox are called fevers. But, after all, it is not usually difficult to decide whether a given morbid condition occurring in the puerperium should be notified. Obviously, temporary febrile disturbances, such as are traceable to constipation, or nervous excitement, do not constitute puerperal fever. Nor would a lying-in woman who happens to have phthisis with fever rightly be notified as suffering from puerperal fever. When, however, the febrile condition has developed so far as is known only since the confinement and is more or less persistent for several days or longer, and especially when there are local manifestations such as peritonitis or cellulitis in the neighbourhood of the generative organs, the case is certainly one in which notification is required under the Act.

THE SERVICE EXAMINATIONS.

SEVERAL correspondents having asked us for information concerning the examination of candidates for Her Majesty's Army and Indian Medical Services we have pleasure in publishing the following questions set at the last examinations in London:—

MEDICINE AND PATHOLOGY (PROFESSOR MCCALL ANDERSON).

1. What is your opinion with regard to the following case: give the grounds for your diagnosis; say what treatment you would recommend; and, in the event of a fatal issue, what would you find post mortem.

A soldier, aged thirty-two, was admitted into hospital on December 4th, 1897. He stated that he had always enjoyed fair health, but admitted that he had led a very irregular life. He complained of debility, some loss of flesh, excessive urination, and, above all, of a right internal squint of some weeks' duration; indeed, it was this which induced him to seek advice.

On examination he was found to be pallid, rather weakly, and slightly emaciated, but there was no fever. The internal squint was pronounced and he was quite unable to turn the eye outwards. There were no head symptoms and the heart and lungs were healthy, while the digestion was fair. But the liver was greatly and uniformly enlarged; it felt very firm and was not the seat of either pain or tenderness. The urine was very pale, 120 ounces per day, specific gravity 1013; it contained a small quantity of albumen and an occasional granular or hyaline tube cast was discovered in the scanty deposit.

Finally, on one shoulder there was a patch of eruption about the size of the hand which had appeared about eight months before admission. It was composed of tubercles of a dusky red tint, with here and there an admixture of violet. Some of these had ulcerated and were capped with greenish crusts. The edge of the patch was rounded, abrupt, and elevated.

2. About what day of the fever does the eruption makes its appearance in the following diseases: (*a*) rubella (German measles); (*b*) morbilli (measles); (*c*) scarlatina; (*d*) typhus; (*e*) enteric fever; (*f*) varicella; and (*g*) variola?

3. How would you treat typical uncomplicated cases of—

(*a*) Lead colic; (*b*) ulcer of the stomach; (*c*) and acute tubular nephritis?

4. Write down what you know with regard to beri-beri.

SURGERY (SIR WILLIAM MACCORMAC, BART.).

All four questions to be answered.

1. Enumerate the complications which may occur in a case of otitis media. Give the symptoms and treatment of abscess of the temporo-sphenoidal lobe dependent upon this cause.

2. Write an account of the course of a case of typical syphilis. Give the treatment you would adopt and mention any matters of importance in arriving at a prognosis.

3. Mention two causes which produce ulceration of the cornea. Give a brief account of the treatment you would adopt in each case, the possible complications which may result, and the manner of dealing with them.

4. Give a description, pathological as well as clinical, of a case of carcinoma of the breast. Describe the varieties of the disease met with and in the event of an operation being performed mention any operative details you consider important.

NATURAL SCIENCES (DR. NORMAN MOORE).

Candidates may answer not more than *six* questions and they must confine themselves to *two* branches of science only.

ZOOLOGY AND COMPARATIVE ANATOMY.

1. Describe the arrangement of the bones in the forelimb of a horse. Point out how the forelimb of a horse differs from and how it resembles the forelimb of a man.

2. Describe the heart and circulatory system of an osseous fish.

3. Give an account of the structure and life-history of amœba.

BOTANY.

1. A tree weighing 12 lb. when planted in a pot of earth in 1894 is found in 1898 to have doubled in weight. The pot is unchanged in weight. The earth weighs 4 oz. less than in 1894.

Explain in what way the tree has obtained its increased weight of 12 lb.

2. Give the characteristics of the following natural orders: malvaceæ, rosaceæ, labiatæ, scrophulariaceæ, solanaceæ.

3. Describe the method of fertilisation in wheat, in the date palm, and in any species of orchis with which you may be acquainted.

PHYSICS.

1. What is meant by the specific gravity of a substance? How would you ascertain the specific gravity of a diamond?

2. Describe experiments illustrating conduction of heat and convection of heat.

3. Describe the structure and use of the gold-leaf electroscope.

PHYSICAL GEOGRAPHY AND GEOLOGY.

1. In what strata do the remains of the following animals occur, and in which are they most abundant: encrinites, ammonites, large saurians, marsupial mammals?

2. Describe the appearances which would indicate that a particular tract of land had once been occupied by a freshwater lake.

3. Define the following terms: (1) fault; (2) isothermal lines; (3) metamorphic rocks; and (4) granite.

ANATOMY AND PHYSIOLOGY (MR. MAKINS).

1. Describe the urinary bladder in the male and give its relations to surrounding structures.

2. Give a short account of the anatomy and functions of the tympanum and its annexes.

3. Trace the course and distribution of the musculo-spiral nerve from its origin to a point on a level with the external condyle of the humerus.

4. Describe the sequence of changes which carbohydrates and fats undergo in their passage through the body.

CHEMISTRY AND MATERIA MEDICA (DR. NORMAN MOORE).

1. Describe an experiment demonstrating the chemical composition of water.

2. What are the properties of phosphorus? Describe its modifications and mention (with their formulæ) the acids into the composition of which it enters.

3. What are the preparations (in the Pharmacopœia) of each of the following metals: mercury, bismuth, iron?

4. Mention the chief expectorants of the Pharmacopœia. State the dose of each (*a*) for an adult, and (*b*) for a child of five years of age.

5. Name the chief drugs used to procure sleep and the dose of each. What precautions ought to be observed in their administration?

GLYCERINATED CALF LYMPH.

WE have received specimens of lymph from the Jenner Institute, 73, Church-road, Battersea, prepared and glycerinated in strict accordance with the methods now well known and first advocated by Dr. S. Monckton Copeman. The tubes, it is stated, are only sent out after testing by plate cultivation and after negative evidence has been obtained of the complete absence of the "adventitious" microbes, as Lord Lister has described them. The calves from which the lymph is obtained are first tested with tuberculin prior to being inoculated. The glycerine used is kept under strict aseptic precautions. As is well known lymph prepared in this approved way is bacteriologically pure and free from pus-producing organisms.

FLUORESCENT SCREENS.

SINCE the discovery of those chemical salts which reveal to the eye the presence of x rays great attention has been paid to the preparation of these substances with a view not only to purity but also to preparing surfaces which shall be uniform in structure and plane so as to yield maximum definition and at the same time minimum absorption of the rays. Mr. J. R. Gotz, of 215, Shaftesbury-avenue, W.C., has submitted to us a fluorescent screen made with the platino-cyanide of barium which in excellence of preparation, uniformity in the size of the crystals, and in the level of the layer adhering to the paper ground is the best we have examined. And experiments with the x rays fully confirm the improvement which such care in preparation might be expected to ensure. The shadows are very sharp, giving better definition than we have noted before. The screens are therefore particularly well adapted to the examination of deep cavities as the chest, or even in the case of the bladder with the view of ascertaining the presence of stone. It is interesting to add that in the experience of most workers in this direction barium platinocyanide is the best salt for practical purposes.

AN UNWIELDY PATIENT.

THE rhinoceros in the Gardens of the Royal Zoological Society has recently undergone an operation at the hands of the able superintendent, Mr. C. Bartlett. The operation in question was the removal of one of the horns which had taken on abnormal growth, being turned downwards so that the skin of the beast's forehead was beginning to be penetrated. The animal having been cast its legs were firmly secured with ropes and the horn was then removed. This is by no means the first operation which Mr. Bartlett has performed upon the larger feræ; among others he some years ago extracted a tooth from a hippopotamus by means of a special pair of forceps about two feet in length.

M.B. London is advised to read "A Text-book of the Principles and Practice of Medicine," by the late Dr. Fagge, edited by Dr. Pye-Smith (J. and A. Churchill) and also either "The Principles and Practice of Medicine," by Dr. W. Osler (Young J. Pentland), or "A Manual of the Practice of Medicine," by Dr. F. Taylor (J. and A. Churchill). The best text-books on Pathology are "Pathology, Systematic and Practical," by Professor D. J. Hamilton (Macmillan and Co.), and "A Manual of Pathology," by Dr. Joseph Coats (Longmans, Green and Co.). For special subjects, Sir W. Gowers's various works on Nervous Diseases must be read, as also Sir William Broadbent's works on Diseases of the Heart and Sir R. Douglas Powell's work "Diseases of the Lungs and Pleura." In mental physiology Professor James Sully's "Psychology" is the most popular work. The article on the "Student's Library and its Use" which appeared in the Students' Number of THE LANCET, published on Aug. 21st, 1897, would perhaps be found useful by our correspondent.

COMMUNICATIONS not noticed in our present issue will receive attention in our next.

Communications, Letters, &c., have been received from—

A.—Messrs. Arnold and Sons, Lond.; The Article Club, Lond., Secretary of; Mons. J. Astier, Paris.

B.—Mr. C. Birchall, Liverpool; Messrs. Burroughs, Wellcome, and Co., Lond.; Mr. G. Billing, Blackpool; Mr. L. Bidwell, Lond; Mr. F. Blake, Dublin; Mr. F. Baxter, Lond.; Berketeld Filter Co., Lond.; Mons. O. Berthier, Paris; Dr. F. W. Barton-Fanning, Norwich; Mr. M. Buchner, Lond.; Messrs. Burgoyne, Burbidges, and Co., Lond.; Mr. H. Brown, Buckhurst Hill.

C.—Mr. F. Candy, Lond.; Dr. H. R. Crocker, Lond.; Mr. T. S. Carter, Leeds; Mr. F. J. H. Coutts, Manchester; Messrs. E. Cook and Co., Lond.; Messrs. J. and A. Churchill, Lond.; City General Press Agency, Lond.; Messrs. R. Cain and Sons, Liverpool; Messrs. Cassell and Co., Lond.; Mr W. F. Clay, Edinburgh; Commercial Press Association, Lond.; Messrs. J. and J. Cash, Coventry; Messrs. W. H. and L. Collingridge, Lond.; Cortland Wagon Co., Lond.

D.—Messrs. J. Defries, Lond.; Mr. W. C. M'Donnell, Newington, N.; Dr. E. O. Daly, Hull; Dental Hospital of London, Secretary of; Dr. M. Dockrell, Lond.; Mr. E. Dodd, Leeds; Messrs. Down Bros., Lond.; Duke Patents Co., Lond.; Mr. E. Dale, Salisbury; D., Lond.

F.—Dr. W. C. Finch, Salisbury; Messrs. Ferris and Co., Bristol; Mr. W. V. Fruman, Reading; Mr. P. J. Freyer, Lond.; Dr. W. E. Fisher, Nice; Messrs. Fassett and Johnston, Lond.; Falona Food Cereal Co., Lond.

G.—Mr. G. S. Gidley, Cullompton; Miss F. Girdlestone, Sunningdale; Dr. A. H. Genard, Northampton; Dr. Germaix, Alger, France; Mr. H. P. Gilbert, Aston Clinton; Mary Gordon Kensington; Glasgow Eye Infirmary, Secretary of.

H.—Mr. B. Huxley, Lond.; Mr. H. C. Howard, Lond.; Mr. C. Heneage, Lond.; Dr. T. H. Hime, Bradford; Mr. A. Harris, Lond.; Mr. Victor Horsley, Lond.; Dr. C. A. Hill, Liverpool; Surgeon-Major M. L. Hearn, Penang, Dr. F. C. P. Howes, Lincoln; Mr. J. Heywood, Manchester; Mr. H. E. Hicks, Bradford.

J.—Messrs. Jacob and Johnson, Winchester; Jenner Society, Gloucester, Hon. Secretary of.

K.—Mr. A. L. Kelsey, Redhill; Herr S. Karger, Berlin; Mr. B. Kühn, Lond.; Dr. R. L. Knaggs, Leeds.

L.—Mr. W. E. Langton, Lond.; Dr. T. M. Legge, Lond., Mr. C. G. Lagana, Lond.; Mons. H. Le Soudier, Paris; Mr. W. Le Queux, Nice.

M.—Dr. E. P. Manby, Liverpool; Messrs. Mather and Crowther, Lond.; Mr. McMunn, Lond.; Mr. V. Matthews, Lond.; Mr. J. N. Maskelyne, Lond.; Dr. A. Mantle, Halifax; Mr. McEllgott, Derbyshire; Mr. M. S. Maitra, Waraha District, India; Medical Society of Victoria, Melbourne, Hon. Secretary of; Messrs. Macmillan and Co., Lond.; Major, Lond.; Maltine Manufacturing Co., Lond.

N.—Mr. L. Newton, Huntingdon; Nauheim, Lond.; Norfolk, Lond; Northamptonshire Nursing Institute, Northampton, Secretary of.

O.—Mr. R. O'Callaghan, Lond.

P.—Dr F. Pott, Bournemouth; *Il Policlinico*, Rome, Editorial Secretary of; Parish of St. Giles Camberwell, Clerk of; Mr. C. P. Plant, Buxton.

Q.—Queen Charlotte's Lying-in Hospital, Lond., Secretary of.

R.—Mr. H. Rundle, Southsea; Messrs. E. T. Radcliffe and Co., Cardiff; Mr. R. Rowell; Dr. S. J. Ross, Bedford; Dr. J. A. Rigby, Preston; Messrs. Rodwell and Co., Grimsby; Royal Halifax Infirmary, Hon. Secretary of; Mr. N. W. Ross, Cambridge; Dr. J. J. Ridge, Enfield; Rose, Ltd., Lond.

S.—Mr. E. Solly, Harrogate; Mr. M. A. Smale, Lond.; Dr. H. C. Smith, Chiswick; St. Mary Islington, Clerk to the Guardians of; Messrs. Street and Co., Lond; Messrs. Salt and Son, Birmingham; Mr. R. Silvestre, Leicester; Messrs. Smith, Elder, and Co., Lond.; Mr. W. J. Smith, Lond.; Mr. T. Smith, Lond.; Messrs. S. Smith and Co., Lond.; Messrs. Street Bros., Lond.

T.—Mr G. Thieme, Leipzig; Mr. C. B. Taylor, Nottingham; Dr. Campbell Thomson, Lond.; Messrs. Thorne and Salter, Lond.; Messrs. Taylor and Weaver, Leytonstone; Taipo, Lond.

U.—Mr. Umney, Lond.

V.—Messrs. C. Vaux and Sons, Sunderland.

W.—Dr. J. D. Wardell, Newcastle-on-Tyne; Mr. H. W. Webber, Plymouth; Wills, Ltd., Lond.; Whitehaven and West Cumberland Infirmary, Whitehaven, Secretary of; Mr. J. Wolff, Gross Geran; Mr. J. H. Wigham, Leeds; Mr. S. Waud, Leicester; Mr. R. H. Wolstenholme, Manchester; Messrs. Wenborn and Sons, Lond.

Z.—Zomela Co., Birmingham.

Letters, each with enclosure, are also acknowledged from—

A.—Mr. H. Astley, Portobello; Mr. W. F. Abbott, Addlestone; A. G. G., Lond.; Mr. E. Appleton, Thornaby-on-Tees; Dr. A. W. M. Auden, Leigh; Messrs. Allen and Hanburys, Lond.; Dr. J. F. Armstrong, South Shields; Alternate, Lond.; Alpha, Alresford; Dr. W. Armstrong, West Boldon.

B.—Mr. H. K. Birley, Rainhill; Messrs. Blake, Sandford, and Blake, Lond.; Messrs. Blondeau et Cie, Lond.; Mr. W. H. Bourke, Lond., Messrs. Brady and Martin, Newcastle-on-Tyne; Mr. H. B. Bannard, Maidenhead; Mr. W. B. Barton, Staunton-on-Wye; Bury Dispensary Hospital, Secretary of; B., Lond.; Messrs. Brown, Gould, and Co., Lond.; Dr. W. C. Bosanquet, Lond.; B. P., Lond.; Mr. F. Bedford, Sheffield; Mr. E. Baker, Birmingham; Mr. J. Bibby, Bamber Bridge; Mr. T. W. Bevan, Nantyglo; Dr. E. E. Blomfield, Knottingley.

C.—Mr. J. Clarke, Hitchin; Dr. Carless, Devizes; Cheltenham General Hospital, Secretary of; Calcutta Medical School, Asst. Secretary of; Messrs. T. Crosbie and Co., Cork; Dr. W. Coates, Lahore; Mr. J. N. Cregeen, Liverpool; Dr. Chitty, Hornsey; Mr. W. T. Clarke, Morley; Mr. S. Crossley, Blackburn; Calumba, Lond.

D.—Messrs. A. De St. Dalmas and Co., Leicester; D. G., Lond.; Dorsal, Lond.; Dr. Dewar, Auckland

E.—Mr. O. Edwards, Leominster; Dr. M. Emin, Lond.; Messrs. Evans, Lescher, and Webb, Lond.; Exchange, Lond.

F.—Mr. G. Foy, Dublin; Mr. D. Funes, Newent; Messrs. Fletcher, Fletcher, and Co., Lond.; Mr. H. Fox, Cork; Dr. W. Fowler, Coventry; Fullers, Ltd., Lond.

G.—Mr. E. Griffiths, Abercarne; Dr. T. Gash, Snodland; Mr. T. H. Gillam, Bromyard; Dr. J. W. Geddes, Winterton; Mr. P. D. Glynn, Athenry; Genuine, Lond.; G. H. W. H., Cheltenham.

H.—Mr. O. Holst, Eastbourne; Mr. J. E. Hancock, Callington; H. N., Lond.; Mr. A. Humphrey, Lond.; Dr. E. D. S. Heyliger, Pembroke; Mr. V. X. Harcourt, Maidstone; Mr. R. Harrison, Liverpool; Messrs. Hooper and Co., Lond.; Halifax (N.S.) Visiting Dispensary, Secretary of; House-Surgeon, Brighton.

I.—Ickringills, Keighley, Secretary of; Iota, Lond.

J.—Dr. H. Johnson, Liverpool; Dr. C. H. L. Johnston, St. John, Canada; Jenner Institute for Calf Lymph, Lond., Secretary of; Mr. J. Jeffares, Chesterfield; J. F. A., Lond.; Dr. G. P. Jerome, Sutton Coldfield.

K.—Messrs. H. and F. Knowles, St. Helens; Messrs. Keith and Co., Edinburgh.

L.—Mr. H. B. Long, Soham; Mr. F. J. Lea, Chilcompton; Lancs, Lond.; Messrs. B. S. Lloyd and Co., Lond.; Dr. J. D. Lloyd, Chirk; Dr. Leech, Manchester; Lithanode Electric Storage Co., Lond.; Lecum Tenens, St Tudy; Mr. B. W. Lamb, Abrighton.

M.—Dr. J. McNaught, Waterfoot; Medicus, Sheffield; M. S. D., Lond.; M.D., Manchester; Malo, Lond.; Dr. J. D. Malcolm, Lond.; Dr. J. Michael, Lond.; Dr. C. Macmaster, Perth; Mr. D. F. Moore, Dublin; Dr. F. H. Maberly, Lond.; Mr. W. Mayhew, Aldborough; Dr. Mason, Pontypool; M. K., Lond.; Mr. J. Monks, Stockport, Mr. S. Mackie, Hodnet.

N.—Nemo, Lond.

O.—Mr. F. A. Osborn, Dover; Dr. W. R. Orr, Newington; Mr. E. W. Ormerod, Warminster; Mr. F. Orchard, Lond.

P.—Mr. H. J. Phillips, Teignmouth; Mr. E. Phillips, Worsley; Dr. A. Q. Paterson, Stockton-on-Tees; Messrs. Paterson, Simons, and Co., Singapore; Messrs. Potter and Tacker, Lond.; P., Maidenhead; Practitioner, Newcastle-on-Tyne.

R.—Dr. Robinson, Honiton.

S.—Dr. Simpson, Tadley; Sigma, Lond.; Mr. P. W. Streatfield, Southborough; Messrs. Spiers and Pond, Lond.; Mr. H. Sell, Lond.; Dr. J. A. Shaw-Mackenzie, Lond.; South Coast, Lond.; Mr. A. W. Smith, Manchester; Mr. G. F. Sydenham, Dulverton; Spes, Lond.; Mr. J. Spencer, Hetton; Stakesby, Lond.; Messrs. Slinger and Son, York.

T.—Dr. Tylecote, Sandon; Theta, Lond.; Mr. H. C. Titterton, Boreham; Mr. W. J. Tilley, Warwick, Queensland; Dr. A. M. Turnbull, Neemuch, India; Traveller, Lond.; Mr. F. Treves, Lond.

V.—Vidua, Lond.; Messrs. J. and J. Vice, Nottingham.

W.—Mr. R. E. Williams, Wrexham; W., Lond.; Wildersdale, Ilfracombe; W. L. F., Lond.; Dr. O. Williams, Burry Port; Welsh Calvinistic Methodists' Foreign Missionary Society, Liverpool, Secretary of; Western General Dispensary, Lond., Secretary of; Messrs. Wright, Layman, and Umney, Lond.; Mr. H. Walker, Aberdeen; Mr. D. H. Whitaker, Horwich; W. H. H., Lond.; Dr. S. Walker, Middlesborough; Mr. W. Webb, Woking; Mr. J. G. Williamson, Lond.; Mr. E. H. Worth, St. Day; W. M. V., Lond.; West Bromwich District Hospital, Secretary of.

X.—X. Y. Z., Leeds; X, Lond.

Z.—Zeta, Lond.

EVERY FRIDAY.

THE LANCET.

PRICE SEVENPENCE.

SUBSCRIPTION, POST FREE.

FOR THE UNITED KINGDOM.		TO THE COLONIES AND ABROAD.	
One Year	£1 12 6	One Year	£1 14 8
Six Months	0 16 3	Six Months	0 17 4
Three Months	0 8 2	Three Months	0 8 8

Subscriptions (which may commence at any time) are payable in advance.

ADVERTISING.

Books and Publications ...	Seven Lines and under	£0 5 0
Official and General Announcements	Ditto	0 5 0
Trade and Miscellaneous Advertisements	Ditto	0 4 6
	Every additional Line	0 0 6

Quarter Page, £1 10s. Half a Page, £2 15s. An Entire Page, £5 5s.

Terms for Position Pages and Serial Insertions on application.

An original and novel feature of "THE LANCET General Advertiser" is a Special Index to Advertisements on pages 2 and 4, which not only affords a ready means of finding any notice, but is in itself an *additional* advertisement.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday, accompanied by a remittance.

Answers are now received at this Office, by special arrangement, to Advertisements appearing in THE LANCET.

The Manager cannot hold himself responsible for the return of testimonials, &c., sent to the Office in reply to Advertisements; copies only should be forwarded.

Cheques and Post Office Orders (crossed "London and Westminster Bank, Westminster Branch") should be made payable to the Manager, Mr. CHARLES GOOD, THE LANCET Office, 423, Strand, London, to whom all letters relating to Advertisements or Subscriptions should be addressed.

THE LANCET can be obtained at all Messrs. W. H. Smith and Son's and other Railway Bookstalls throughout the United Kingdom. Advertisements are also received by them and all other Advertising Agents.

Agent for the Advertisement Department in France—J. ASTIER, 8, Rue Traversière, Asnières, Paris.